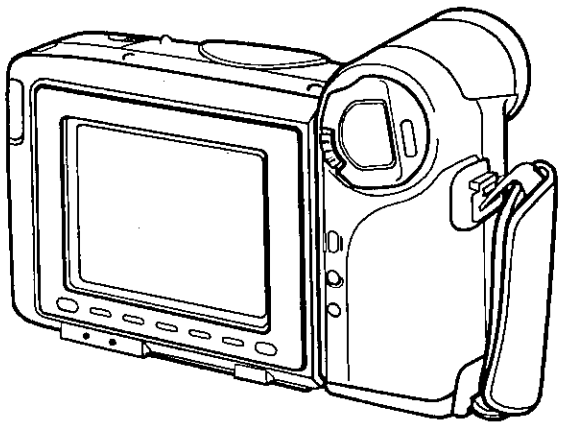
SHARP SERVICE MANUAL

S75T8VL-H420S

LIQUID CRYSTAL CAMCORDER Hi 8 PAL



VL-H420S/H/X
VL-H4200S
MODELS VL-H90E

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

In addition to this service manual, the mechanism section and electrical adjustment section are available as the technical manuals.

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SHARP CORPORATION

1. FEATURES AND SPECIFICATIONS

●. FEATURES

1. Hi8 RECORDING/PLAYBACK SYSTEM
2. SUPER LOW REFLECTANCE/ADJUSTABLE 4" COLOUR LCD MONITOR AND BUILT-IN SPEAKER
3. MANUAL IRIS AND PROGRAMME AE (SCENE MENU) FOR 4 SHOOTING SITUATIONS—SPORT, SNOW/SAND, TWILIGHT, AND PARTY
4. 20× DIGITAL ZOOM (OPTICAL 8× POWER ZOOM)
5. DIGITAL 2.5× QUICK ZOOM (2.5× EXTEND ZOOM)
6. DIGITAL IMAGE STABILIZATION
7. DIGITAL STILL/STROBE/SNAP RECORDING
8. Hi-Fi STEREO SOUND
9. SELF RECORDING MESSAGE OSD
10. BATTERY AND TAPE REMAINING INDICATORS
11. INFRARED REMOTE CONTROL
12. 16:9 WIDE SCREEN
13. PROGRAMME SEARCH/QUICK RETURN
14. BACKLIGHT COMPENSATION
15. 1/10000, 1/4000, 1/1000, 1/250, 1/120, AND STANDARD 1/50-SECOND SELECTABLE HIGH-SPEED ELECTRONIC SHUTTER FOR BLUR-FREE STILL IMAGES
16. FADE IN AND FADE OUT
17. FLYING ERASE HEAD FOR EDITING
18. EDIT SEARCH
19. WARNING INDICATORS—LOW BATTERY, LOW LIGHT, TAPE END, ETC.
20. 3-WAY POWER SOURCE: AC, RECHARGEABLE BATTERY, AND CAR BATTERY (with optional VR-33CH or VR-410CA)

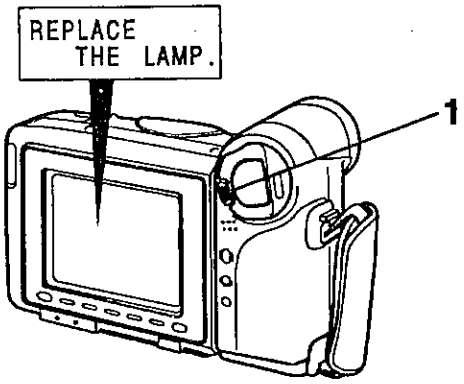
SPECIFICATIONS

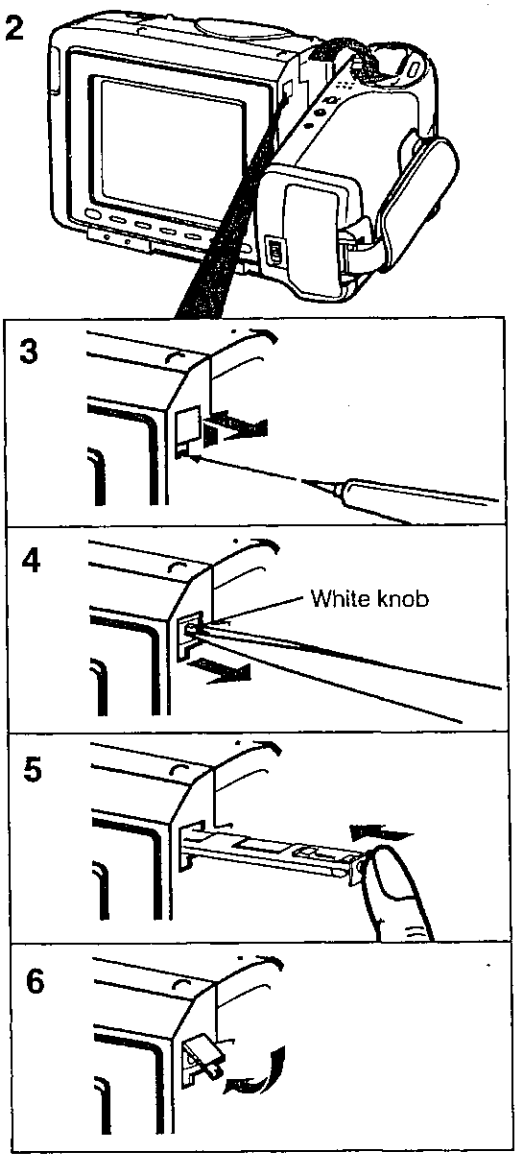
Signal System:	PAL standard
Recording System:	8 mm format, 2 rotary heads, helical scanning system
Cassette:	8 mm video tape, MP type
Recording/Playback Time:	120 minutes (P5-120)
Tape Speed:	20.051 mm/second
Pickup Device:	¼" CCD image sensor (with approx. 470,000 pixels including optical black)
Lens:	8 × power zoom lens (F1.8, f=4.5–36 mm), full-range auto focus, 20× with digital zoom
Lens Filter Diameter:	37 mm
Monitor:	4" full-colour LCD screen (TFT active matrix)
Speaker Output:	300 mW
Microphone:	Electret stereo microphone
External Microphone Input:	−66 dBs, plug-in-power microphone (DC 2.5–4.0 V)
Colour Temperature Compensation:	Auto white balance
Minimum Illumination:	6 lux* (with gain-up)
Video Output Level:	1.0 Vp-p 75-ohm unbalanced
Audio Output Level:	−8 dBs, impedance less than 2.2 kohms
Power Requirement:	DC 3.6 V
Power Consumption:	7.7 W (during camera recording in Full Auto mode with zoom motor off, backlight in normal mode)
Operating Temperature:	0°C to +40°C
Operating Humidity:	35% to 80%
Storage Temperature:	−20°C to +60°C
Dimensions (approx.):	199.0 × 136.5 × 90.0 mm (W/H/D)
Weight (approx.):	910 g (without battery pack, lithium battery, video cassette, and lens protector)

AC Adaptor/Battery Charger

Power Requirement:	AC 110–240 V, 50/60 Hz
DC Output:	4.5 V
Power Consumption:	27 W
Dimensions (approx.):	75.0 × 50.5 × 135.0 mm (W/H/D)
Weight (approx.):	*360 g (*Hong Kong model: 425 g)

3. PART NAMES AND FUNCTION





The fluorescent lamp backlight used in this VIEWCAM will eventually need replacing. If you continue to use the VIEWCAM when the fluorescent lamp has almost reached the end of its service life, the "REPLACE THE LAMP." indicator will be displayed on the monitor for approximately one minute. When this occurs, purchase a replacement lamp (KLMPV0014TAZZ) from your dealer or a SHARP Full Line Parts Distributor, and replace the old lamp.

REPLACING THE FLUORESCENT LAMP BACKLIGHT

1. Set the Operate switch to OFF to turn off the VIEWCAM, and wait about 15 minutes for the lamp unit to cool down.
2. Rotate the camera module of the VIEWCAM halfway forward in the direction of the arrow.
3. Remove the lamp compartment cover: using a pointed object such as the point of a pen, push the cover release "■" upward, and then pull outward.
4. Carefully hold the end (white knob) of the lamp unit with tweezers, and pull it out.
5. Insert the replacement lamp unit into the compartment. See note below.
6. Replace the fluorescent lamp compartment cover.

Notes:
- Be sure to insert the replacement fluorescent lamp straight in, in the direction of the arrow, into the compartment. Do not press diagonally as it may cause contact failure.
- The fluorescent light may flicker when first turned on. Should this occur, turn off the VIEWCAM, and then turn it on again.

CAUTION:

- The fluorescent lamp is hot during and immediately after use of the VIEWCAM. Wait at least 15 minutes after turning the power off before attempting to change the lamp, to allow time for it to cool down. Attempting to change the lamp unit while it is still hot may result in burns or other injuries.

4. Handling of Ni-Cd battery

Please be noted that two types of battery are used in our CAMCORDER, and each of them should be handled in a different manner respectively: One is Ni-Cd battery employed in this model (and the other is conventional Sealed Lead-Acid battery).

1. Storage
(1) The battery should be stored in normal room temperature and humidity. It will have a shorter life if it is placed and stored in high or low temperature.
(2) Ni-Cd battery should be stored in discharged condition.
(On the contrary, Sealed Lead-Acid battery should be stored in full-charged condition.)

2. Charging
(1) Battery chager must be a genuine one.
It a wrong charger is used, the electrodes (+ and -) will be damaged.
(2) This Ni-Cd battery should be charged just before use.
For a longer life, keep it in discharged condition and charge it just before use.
(As for Sealed Lead-Acid battery, charge should be done periodically.)
(3) Over charge should be avoided.
Over charging will affect the life of the battery. Attempting to charge battery again in a short period (say within half a day) may result in an overcharge, causing a shorter life of the battery.
(4) Charging in a hot place should be avoided.
As it will affect the life of the battery, charging should be done in a cool place.
If it is charged in a hot place, the battery may have abnormally high temperature, causing a shorter life of it.

Protect your environment!
Batteries must not be thrown into household waste; they need a special treatment.

Der Umwelz zuliebe!
Batterien dürfen nicht mit den Siedlungsabfällen entsorgt werden, sondern verlangen Sonderbehandlung.

Pensez à votre environement!
Ne pas jeter les piles avec les ordures ménagères, exige un traitement spécial.

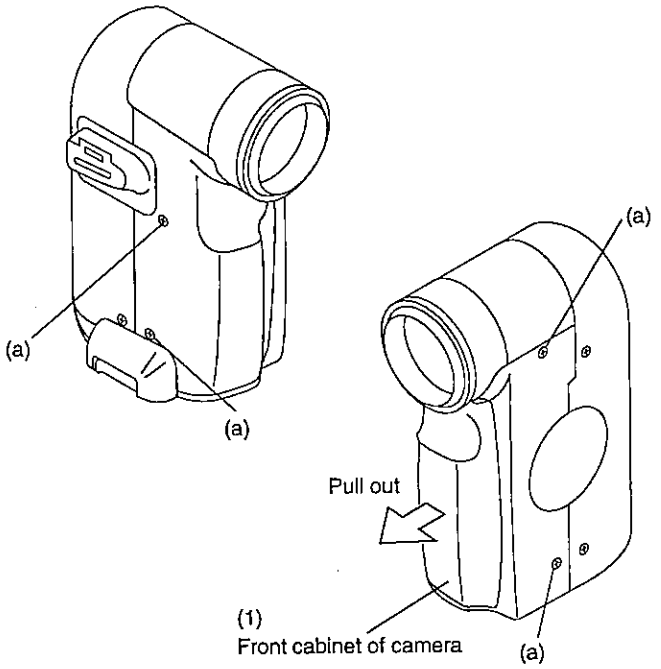
Do not put this battery pack in household rubbish, since the battery contains cadmium which can be recycled.

5. DISSASSEMBLY AND REASSENBLY

5-1. Removal of the camera section

Note:
Before removing the cabinet, turn the power supply to "OFF", and verify that the battery is not provided.

1. Remove four screws ((a)XiPSF20P04000). Pressing the head section to disengage the hook as shown in Fig. A, pull out the front cabinet (1) of the camera.



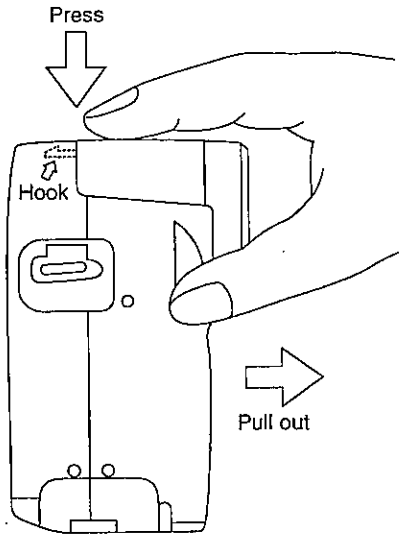
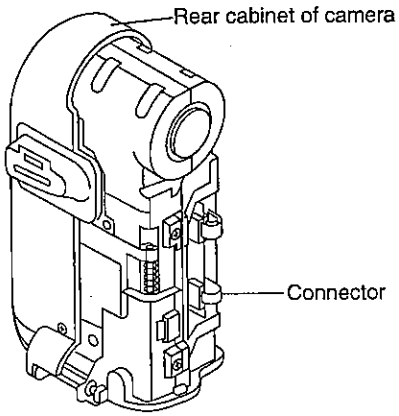


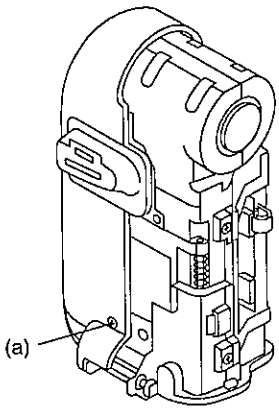
Fig. A

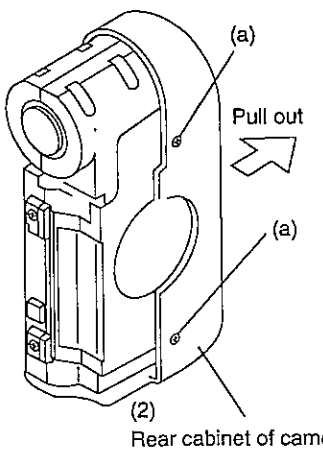
2. Disconnect one connector.

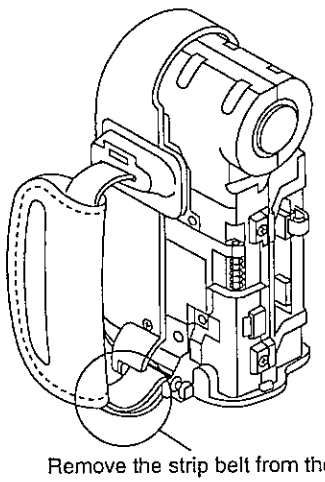


Note:
When assembling the rear cabinet of the camera, pass FPC between the camera shield case and tilt frame C, and insert it into the connector.

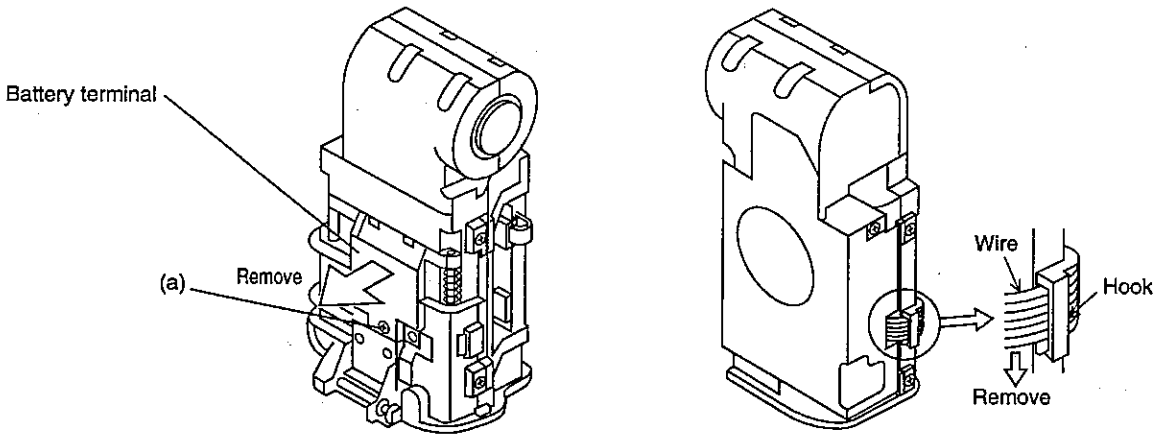
3. Remove three screws ((a)XiPSF20P04000), and pull off the rear cabinet (2) of the camera backward. Also remove the lower side of the hand strip at the same time.



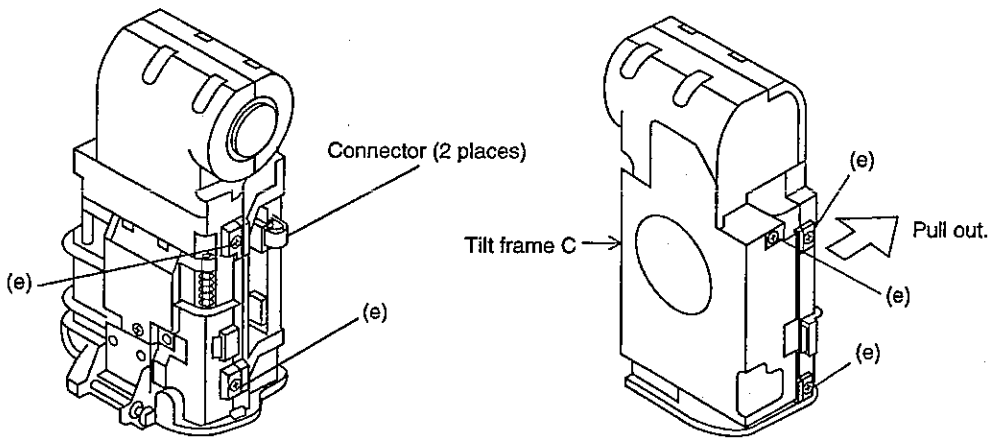




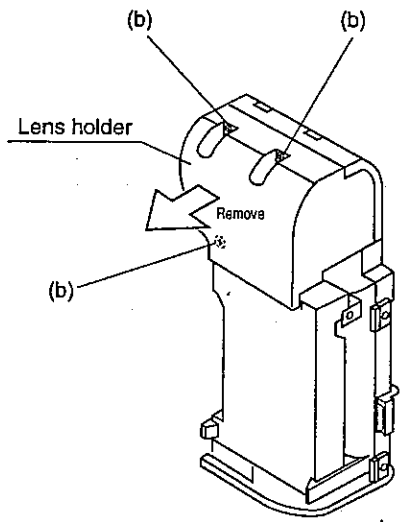
4. Remove one screw ((a)XiPSF20P04000), remove the battery terminal, and disengage the wire from the hook.



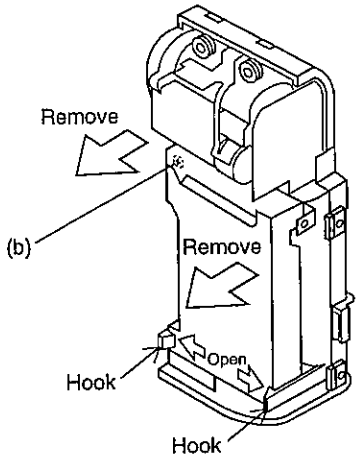
5. Remove the connector (2 places) and five screws ((e)XiPSD20P03000), and pull out the connectors from the tilt frame C.



6. Remove three screws ((b)LX-HZ0018TAFF), and remove the lens holder.

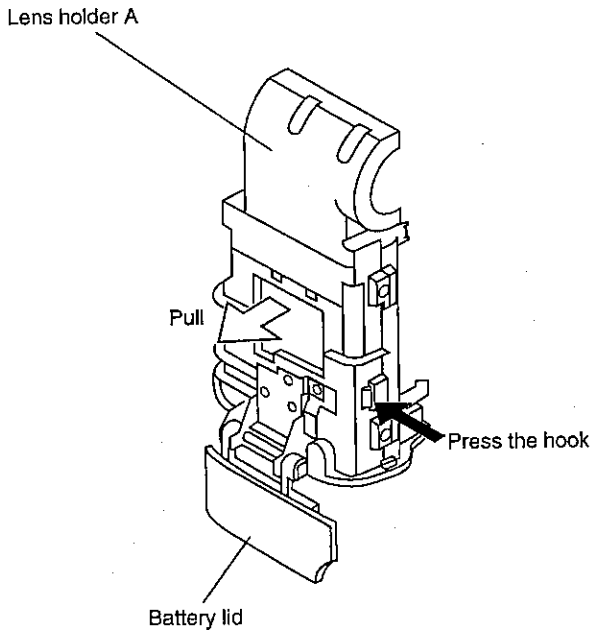


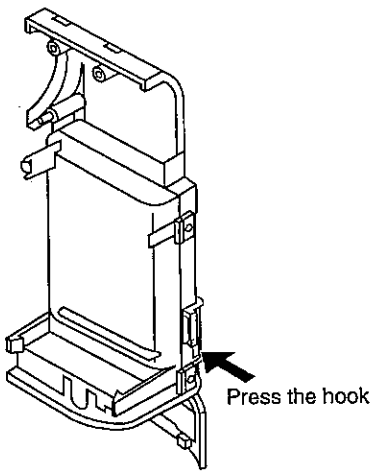
7. Remove one screw ((b)LX-HZ0018TAFF). Opening two hooks outward, remove the camera PWB unit and lens unit together.



Note:
Since the camera PWB unit and lens unit are connected with the FPC, take care to prevent damaging the FPC.

8. Open the battery lid. Pressing two hooks, pull out the battery holder A.



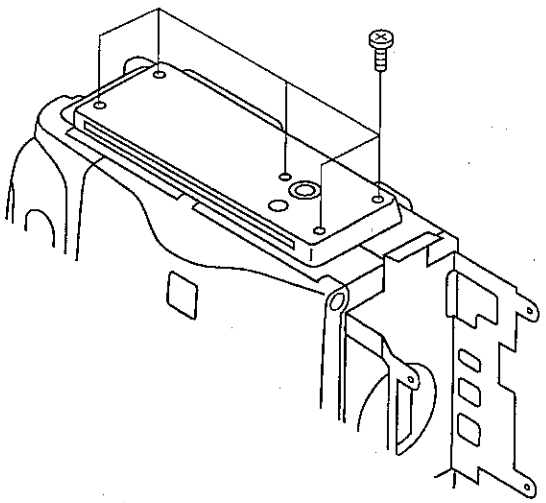


Notes:
- Be sure to keep the battery lid open during working.
- When assembling the battery holder A, be sure to keep the battery lid open.

5-2. Disassembling the set (Example of main body)

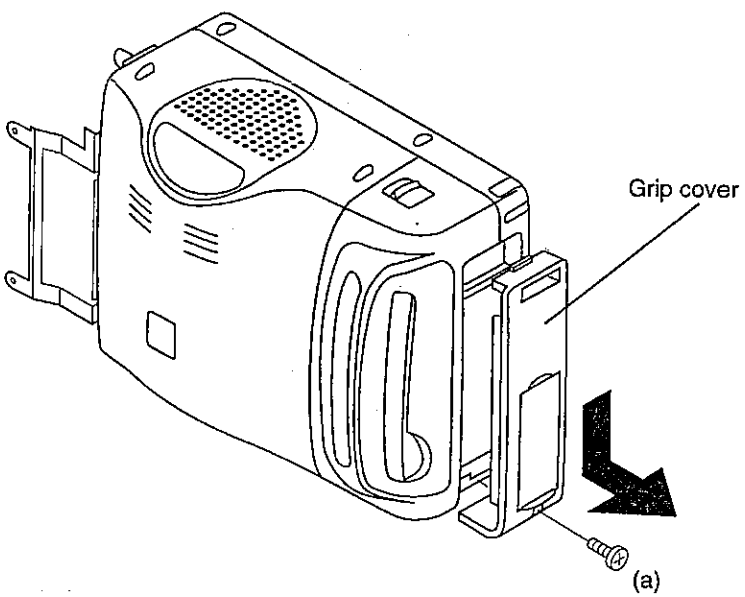
5-2-1. Removing the bottom cover

(1) Remove the five screws ((a)XiPSF20P04000), and remove the bottom cover ass'y from the main body.



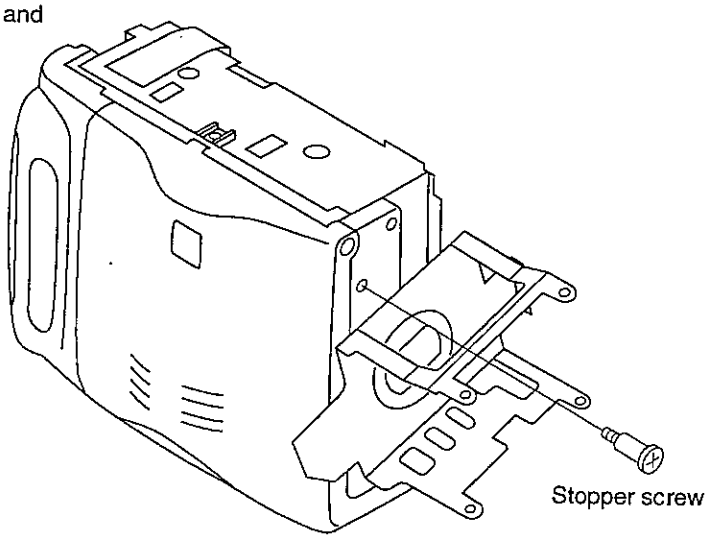
5-2-2. Removing the grip cover

(1) Remove the one screw ((a)XiPSF20P04000), and remove the grip cover ass'y from the main body.

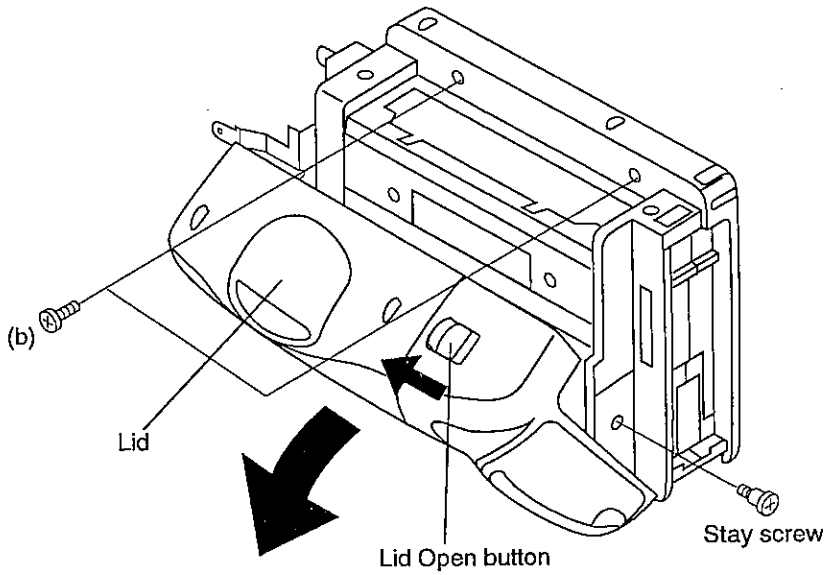


5-2-3. Removing the cabinet L

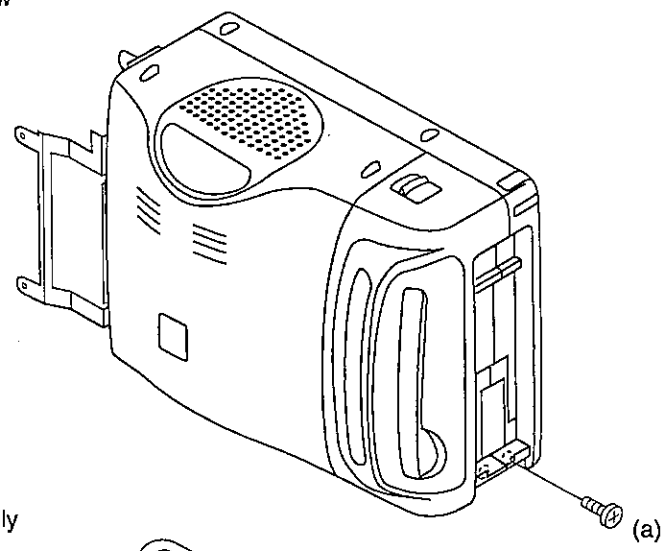
(1) Shift the Lid Open button in the arrow direction to open the lid. Remove the stay screw (LX-BZ0186TAFF).
(2) Turn the tilt frame C till the screwdriver is easily inserted, and remove the stopper screw (LX-BZ0185TAFF).



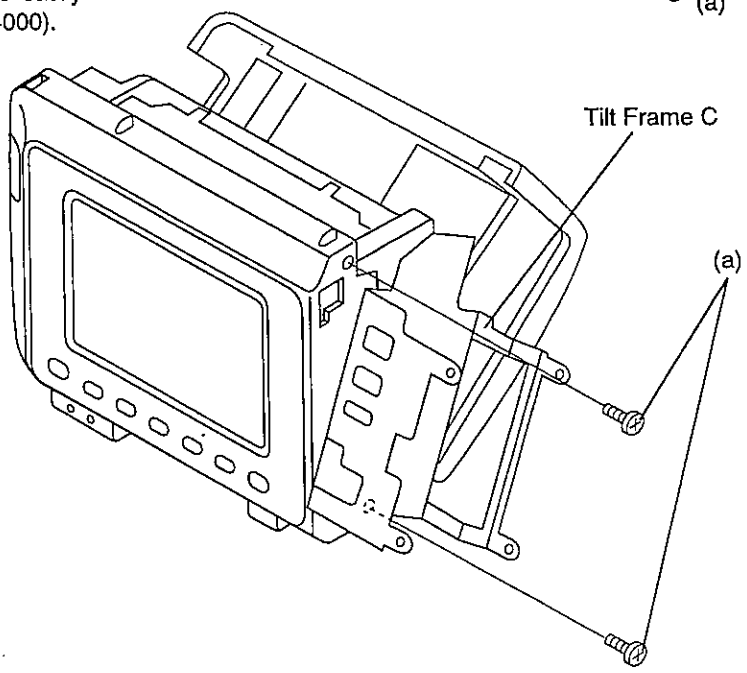
(3) Remove the two screws ((b)LX-HZ0018TAFF) with the lid opened.



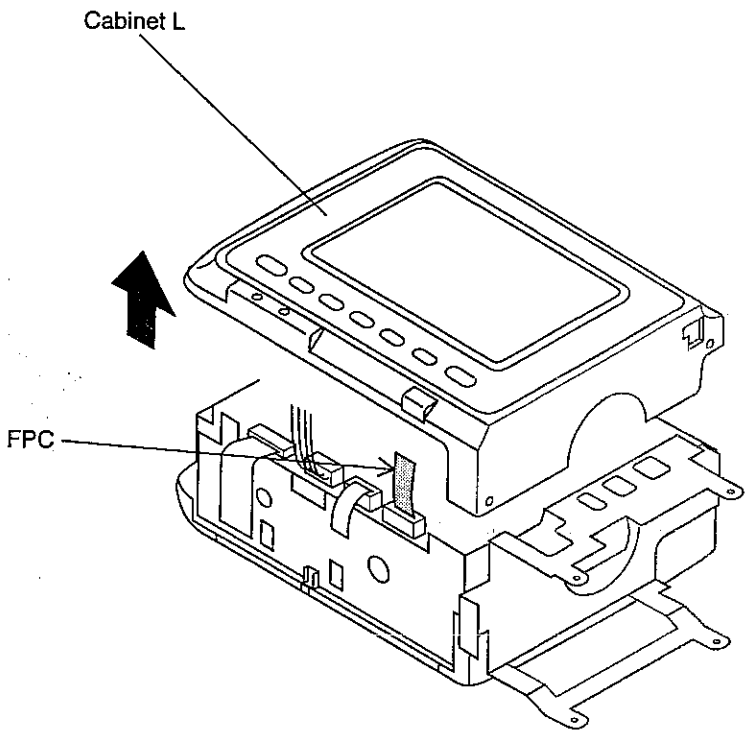
(4) After removing the grip cover, the one screw ((a)XiPSF20P04000).



(5) Turn the tilt frame C so that the screwdriver can be easily inserted, and remove the two screws ((a)XiPSF20P04000).

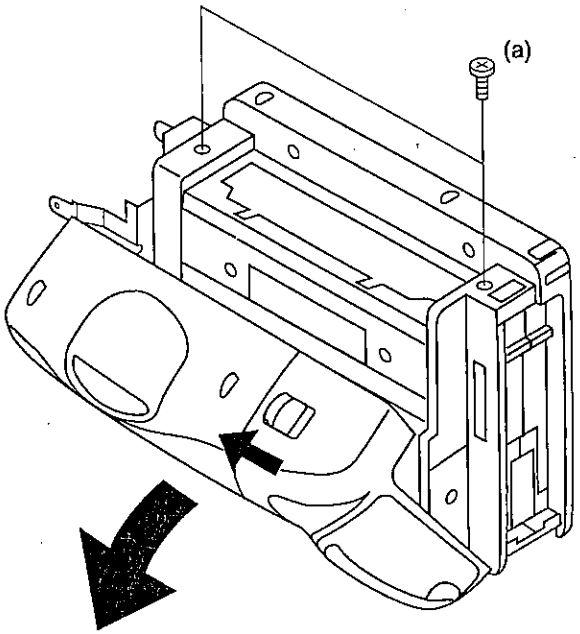


(6) Remove the FPC and headphones/microphone connectors, and then remove the cabinet L from the main body.



5-2-4. Removing the cabinet V

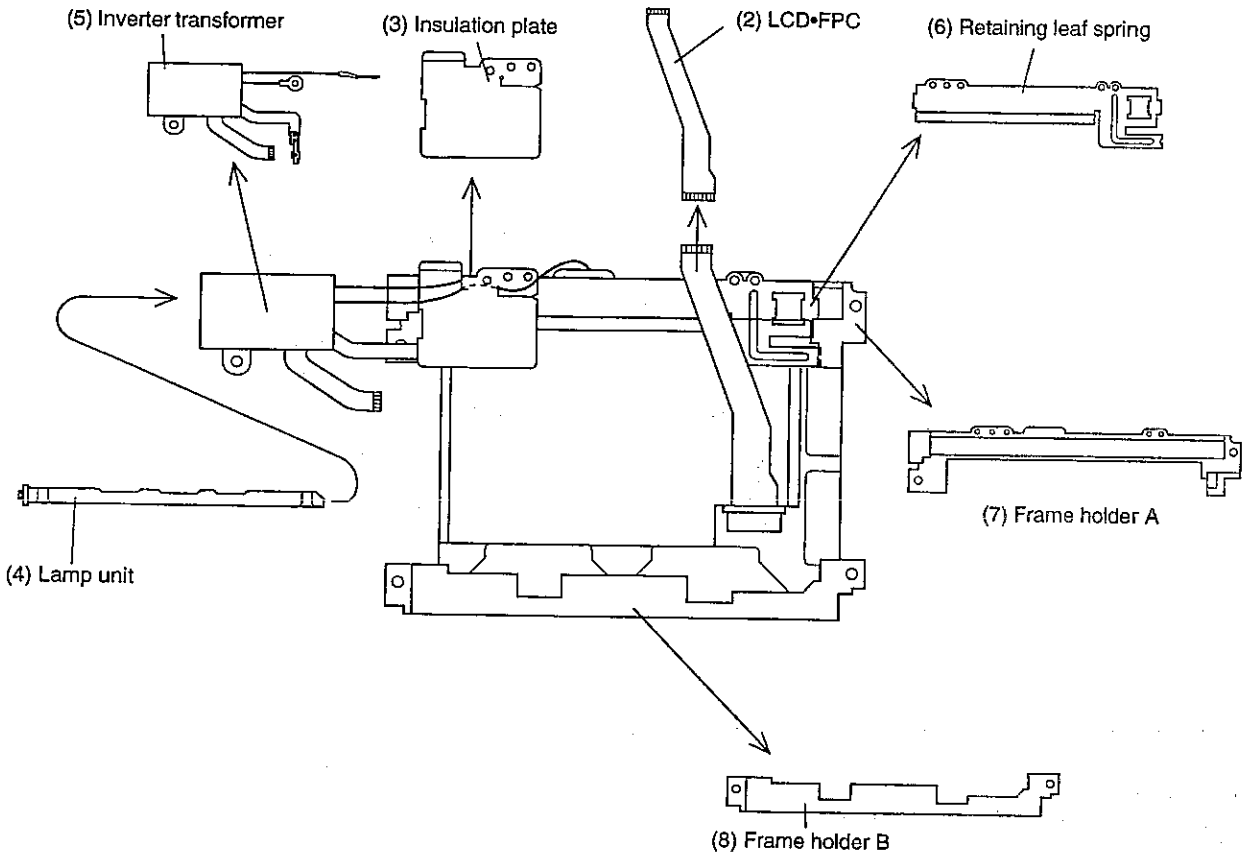
(1) Shift the Lid Open button in the arrow direction to open the lid.
Remove the two screws ((a)XiPSF20P04000).

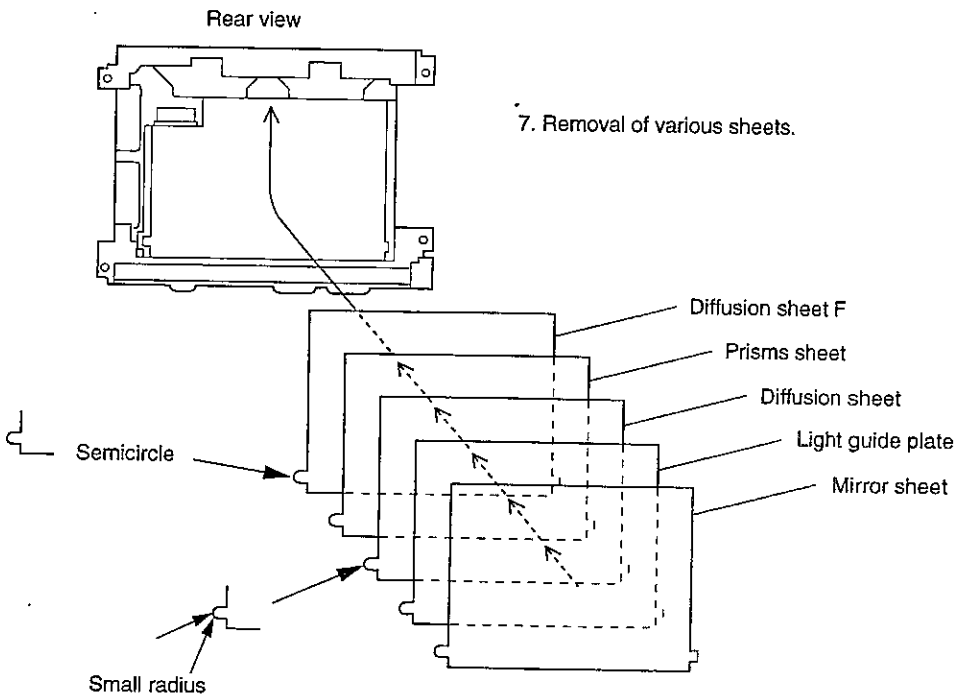


(2) Remove the one screw ((c)XiPSD20P03000) on the bottom of cabinet V.
Remove the connector of microphone FPC.
(3) Turn the tilt frame C so that the screwdriver can be easily inserted, and the one screw ((a)XiPSF20P04000).
(4) After removing the grip cover, remove the one screw ((a)XiPSF20P04000).

Removal of the LCD

1. Remove the shild sheet.
2. Disconnect LCD•FPC (2) from the connector.
3. Remove one screw ((i)LX-HZ3025CEFF), and remove the insulation plate (3).
4. Remove the lamp unit (4) from the holder.
5. Remove four screws ((i)LX-HZ3025CEFF), and remove the inverter transformer (5) and the retaining leaf spring (6).
6. Remove four screws ((b)LX-HZ0018TAFF), and remove the frame holder A (7) and frame holder B (8).
7. Pull out various sheets from the LCD unit.





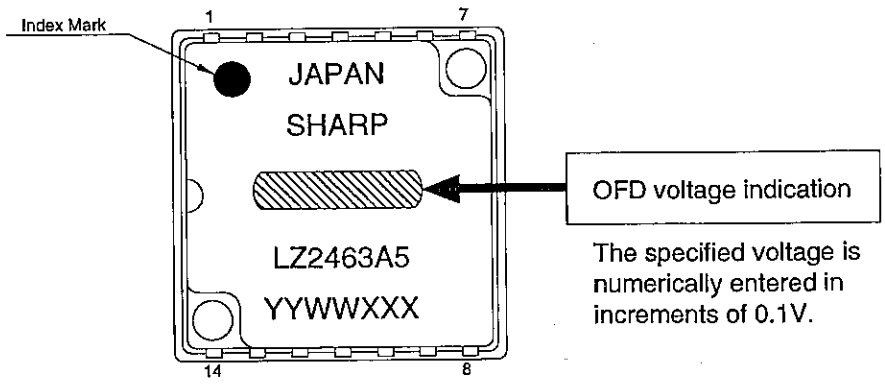
5-6. REPLACEMENT OF CCD SENSOR

5-6-1. BEFORE REPLACEMENT

1) The CCD image sensor is more sensitive to electrostatic breakage than C-MOS LSI. Therefore sufficient means to prevent electrostatic damage must be taken when it is replaced.
- Ground the soldering iron.
- Ground also the human body, using the wrist strap(through an 1 Mohm resistor).
- Until the CCDsensor is mounted on the PWB, fit it to the conductive sponge, and short-circuit the foot lead.

2) Take utmost care so that the surface glass of CCD sensor and optical filter are not contaminated and damaged. If any contamination is found, for example fingerprint, wipe it off with silicon paper or clean chamois skin.
3) When replacing the CCD sensor, use the antistaic grounded soldring iron, and perform quickly soldering.
4) Before mounting the CCD sensor, read the V-OFD voltage shown on the rear side of CCD sensor, and record it. When adjisting V-OFD voltage, refer to item 2 of "Adjustment Procedure".

7. Removal of the various sheets



Note:
Indication of voltage (ofd) set value.
Voltage set value is indicated on the back of the CCD sensor.

V-OFD voltage marked on the back of CCD

5-6-2. REMOVAL OF CCD

1) Unsolder the CCD sensor leads from the sensor PWB.
2) Take out the sensor PWB.
3) Remove the two screws (2), and remove the sensor holder and CCD sensor.

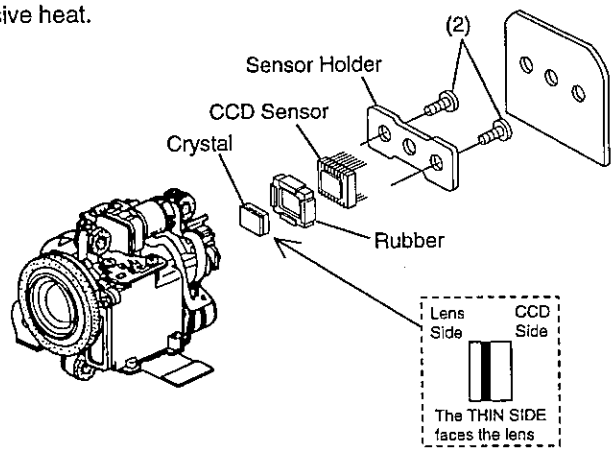
5-6-3. MOUNTING OF CCD

1) Place the lens unit upright (since the CCD sensor mount ID faces upward, care must be taken so as not to damage the front lens of unit), put the crystal filter first and then the dust protection rubber into the CCD holder of lens unit. Set the crystal unit with its thin side toward the lens unit.
2) Place the CCD sensor so that the its No. 1 pin is at the right lower (Positioning hole to be at right), and put the CCD sensor into the CCD holder. For smooth and tight fitting, press the right lower part of back of CCD sensor, and then press the left upper part.

Note: Pay attention to the direction of CCD sensor.

3) Place the sensor holder so that its two round markings be visible, and fix the sensor holder with the two screws (2).
4) Mount the sensor PWB so that the CCD sensor leads go thorough the PWB holes.
5) Solder the CCD sensor lead to the sensor PWB.

Note: Take care not to apply excessive heat.



5-7. INITIAL SETTING OF EEPROM IC

5-7-1. IC706 (EEPROM)

When the IC706 has been replaced, make the following settings and adjustments.

• System code setting

* Set the test mode to the VCR adjustment mode. Take the following steps.

1) Destination code — Write the destination data (model numbers) to the addresses 02 (Main) and 0A (Sub).

Destination	02 (Main)	0A (Sub)
S, H	0A	F5
X	0C	F3
E	0B	F4

For calling the addresses and writing the data, refer to the VCR adjustment mode.

2) Specification switching code

Address	Data
03 (Main)	05
0B (Sub)	FA

3) Menu selection code

Address	Data
04 (Main)	00
0C (Sub)	FF

4) Software selection code

Address	Data
05 (Main)	00
0D (Sub)	FF

5) Model code

Model	01 (Main)	09 (Sub)
H420S/H/X	00	FF
H90E	00	FF
H4200S	04	FB

* After setting the above codes, clear the VCR adjustment mode and turn off the power.

Adjustments to follow

Make the system controller servo, VCR, and LCD adjustments according to their respective instructions.

5-7-2. IC502 (EEPROM)

When the IC502 has been replaced, make the camera adjustment according to its instructions.

5-7-3. HEAD AMP ADJUSTMENT

For the head amplifier mechanism relay unit (RAMP-0005TAN1), EEPROM (IC303) is provided.
In this ROM the following one data are written:
(1) PB SW-P adjustment
The data writing (adjustment) is made on the assembly of mechanism and head amplifier mechanism relay unit.
In any case be sure to execute the adjustments (1).

The adjustment method is described in Section "ADJUSTING THE VCR CIRCUIT".

5-8. ADJUSTING THE Y/C, AUDIO AND LCD CIRCUITS ON MODELS WITHOUT A/V IN MODE (A/V IN MODE SET-UP PRODUCE)

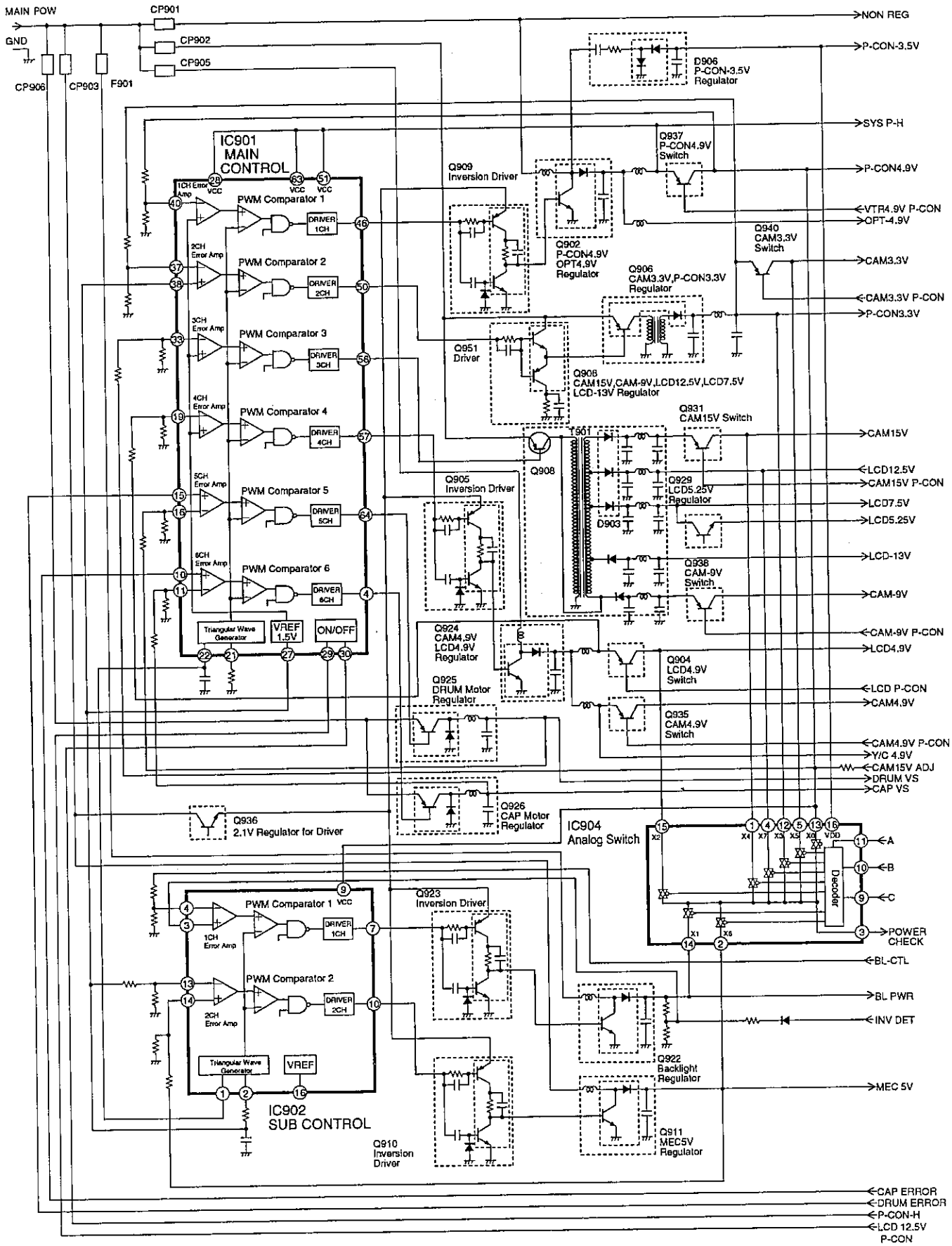
1) Using the remote control (RRMCG0033TASA) for adjustment, turn on the adjustment mode.

2) Set up the adjustment address (example : EEmode adjustment address 14). Once this address has been set up, the A/V IN mode (test mode) is automatically brought and the images appear on the LCD display.

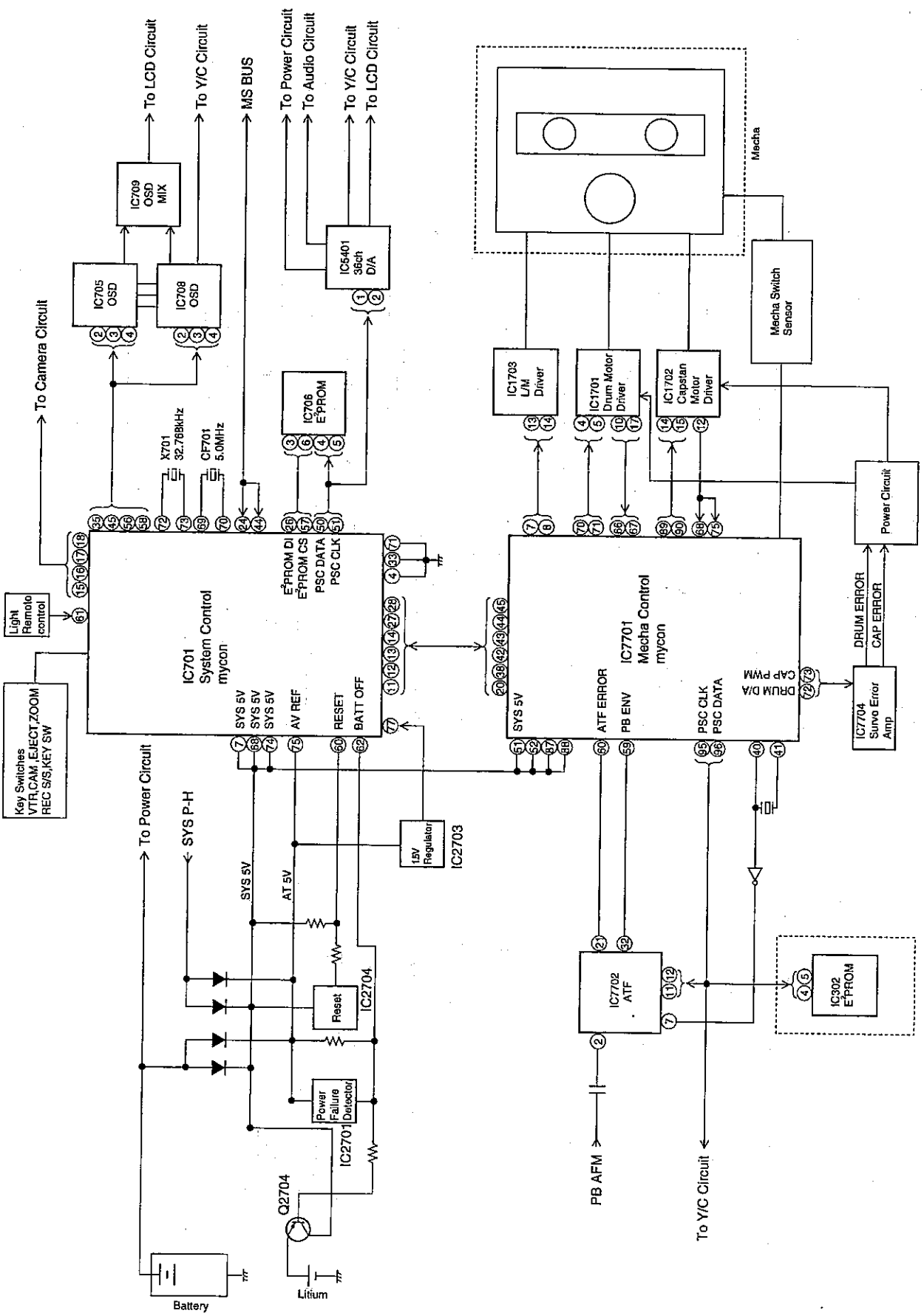
3) Now make the adjustments referring to the instruotions in the manual.

6. SYSTEM BLOCK DIAGRAM

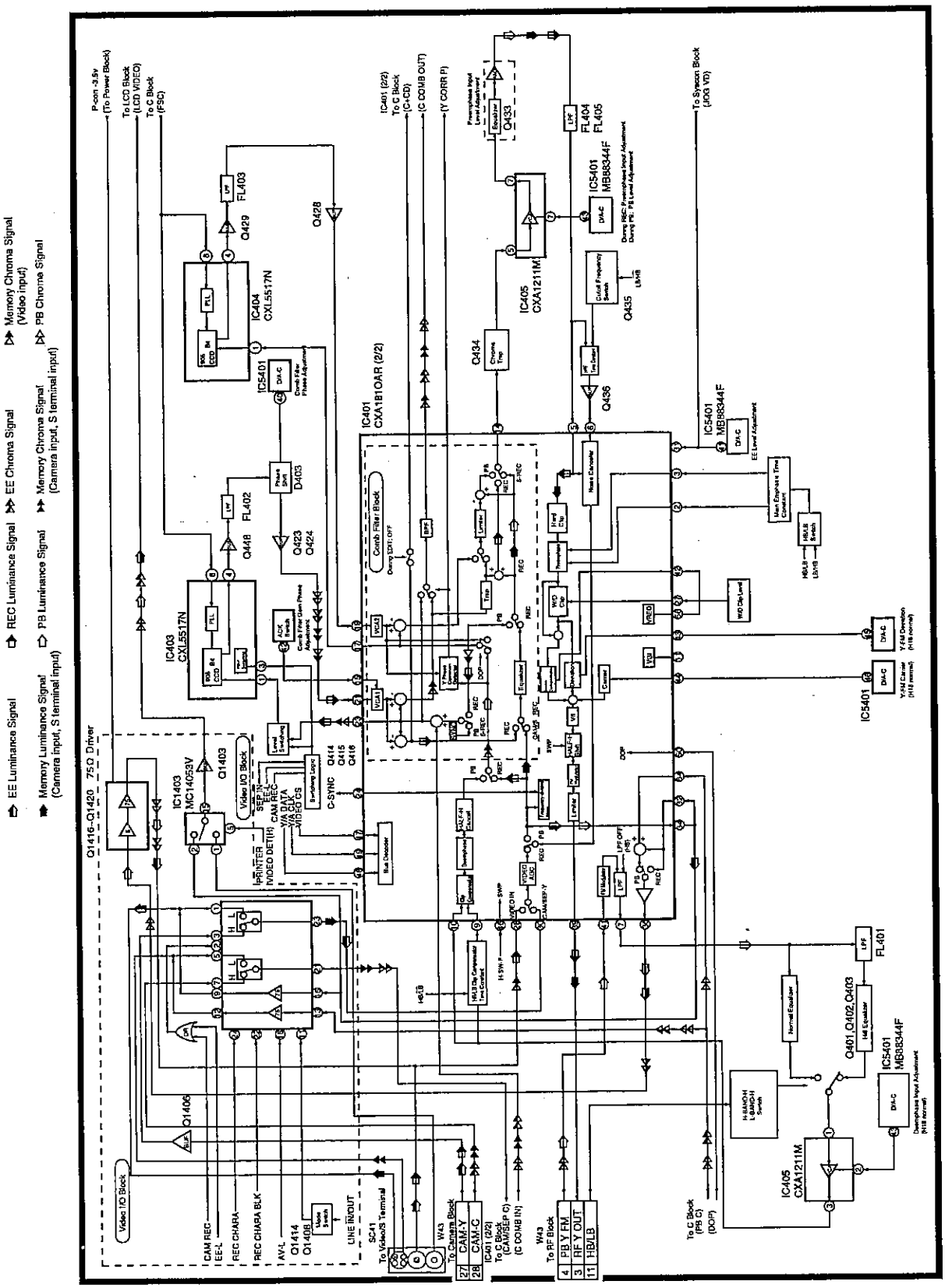
6-1. POWER BLOCK DIAGRAM



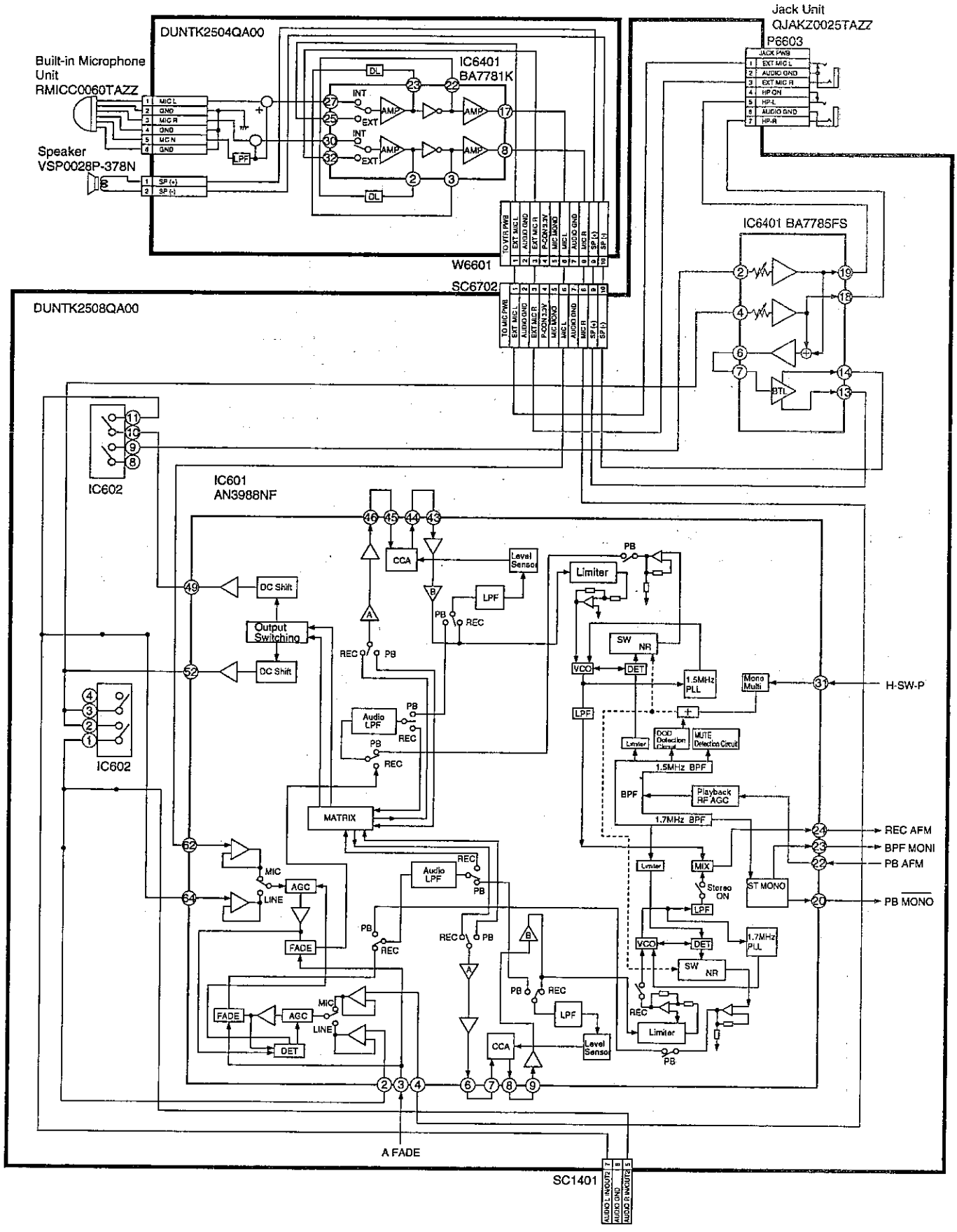
6-2. SYSTEM SERVO BLOCK DIAGRAM



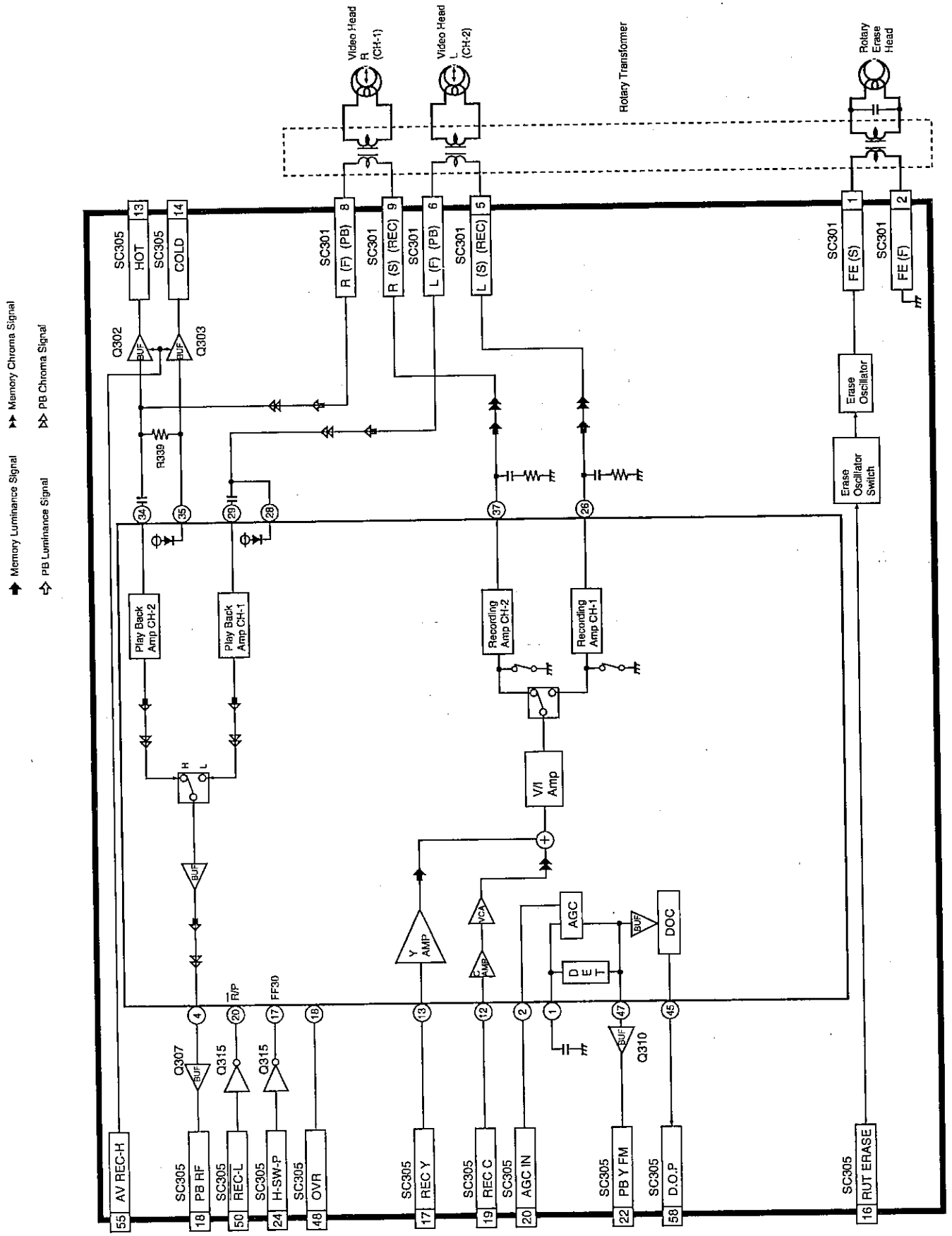
6-3. Y/C-Y BLOCK DIAGRAM



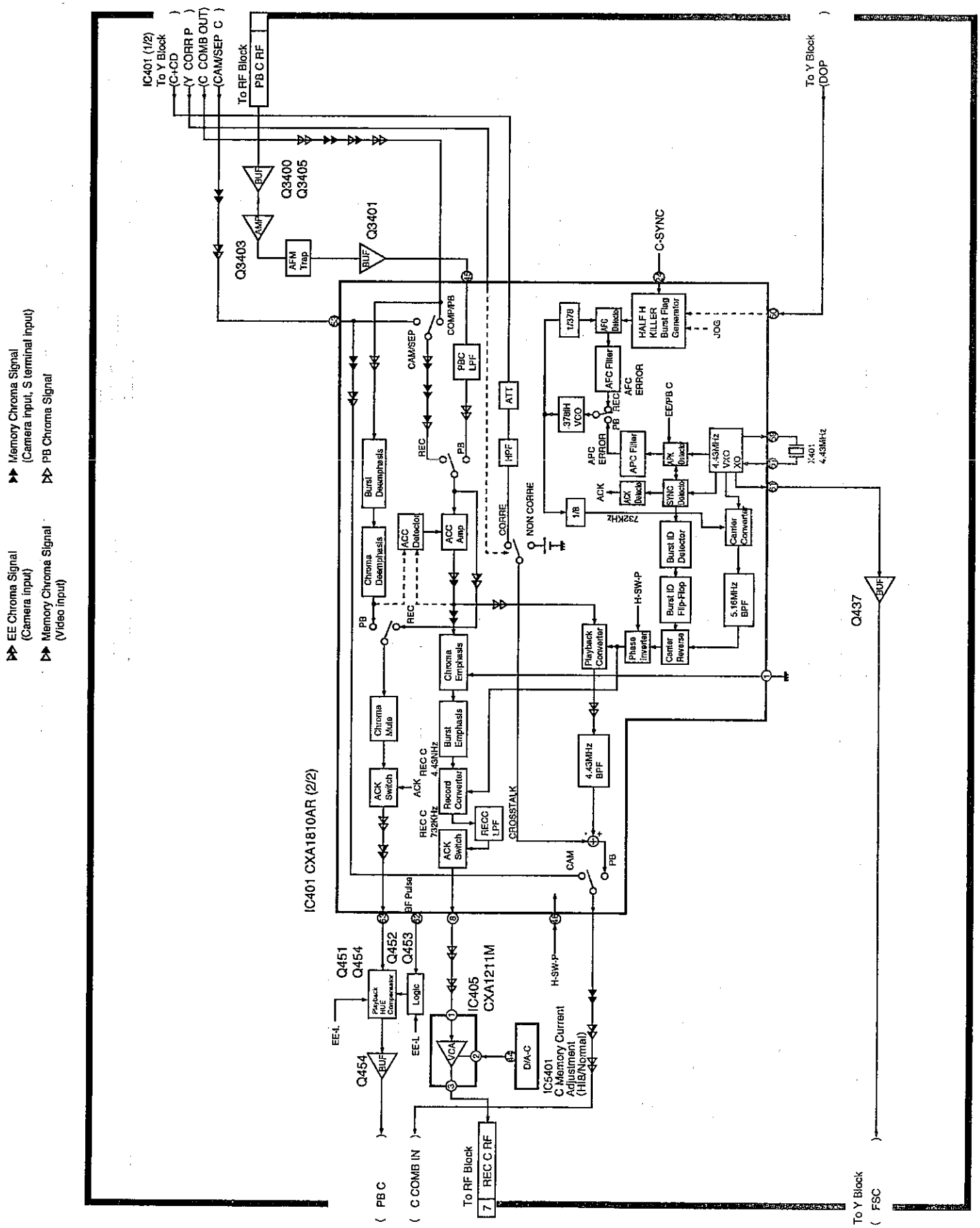
6-4. AUDIO BLOCK DIAGRAM



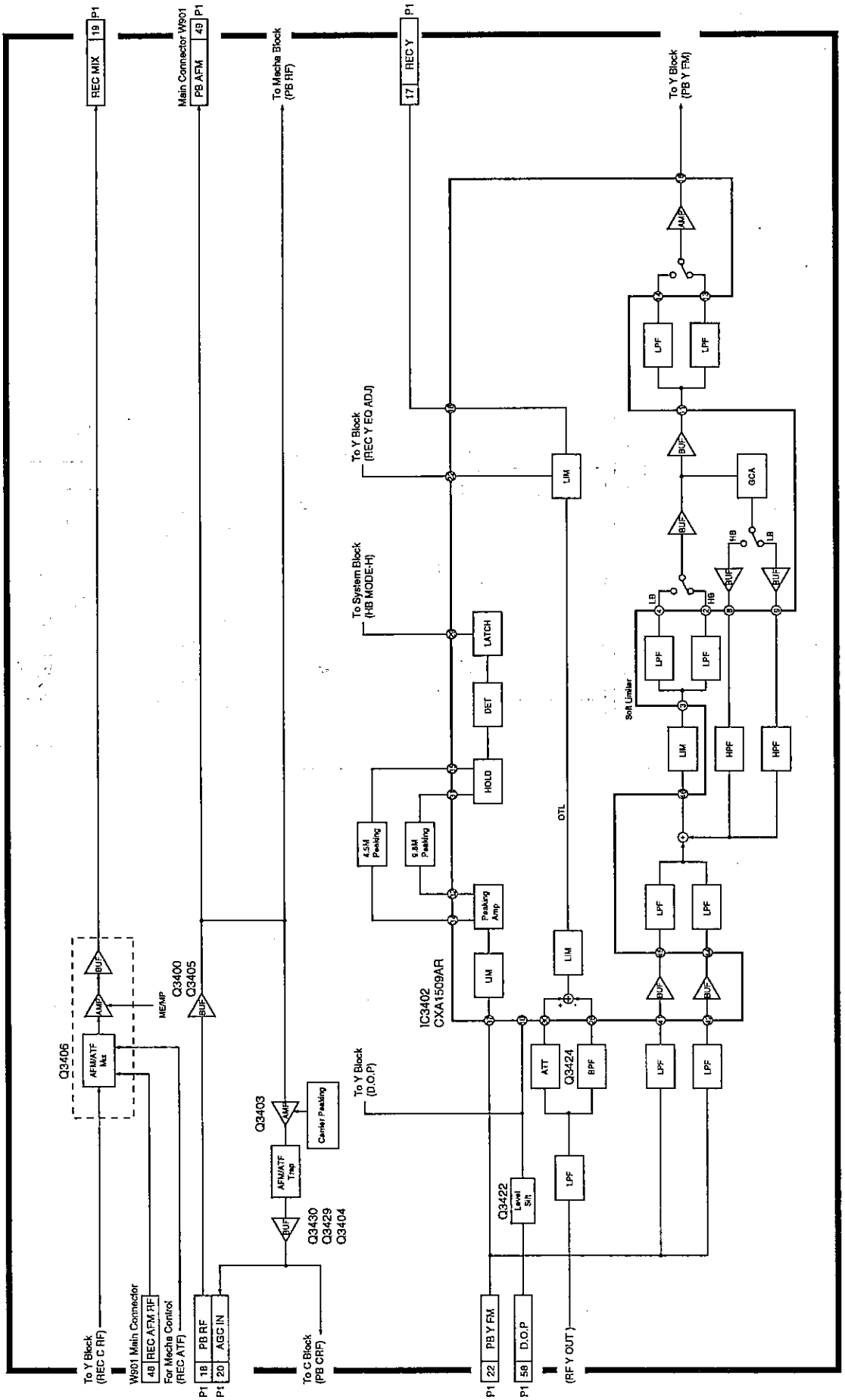
6-5. HEAD AMP BLOCK DIAGRAM



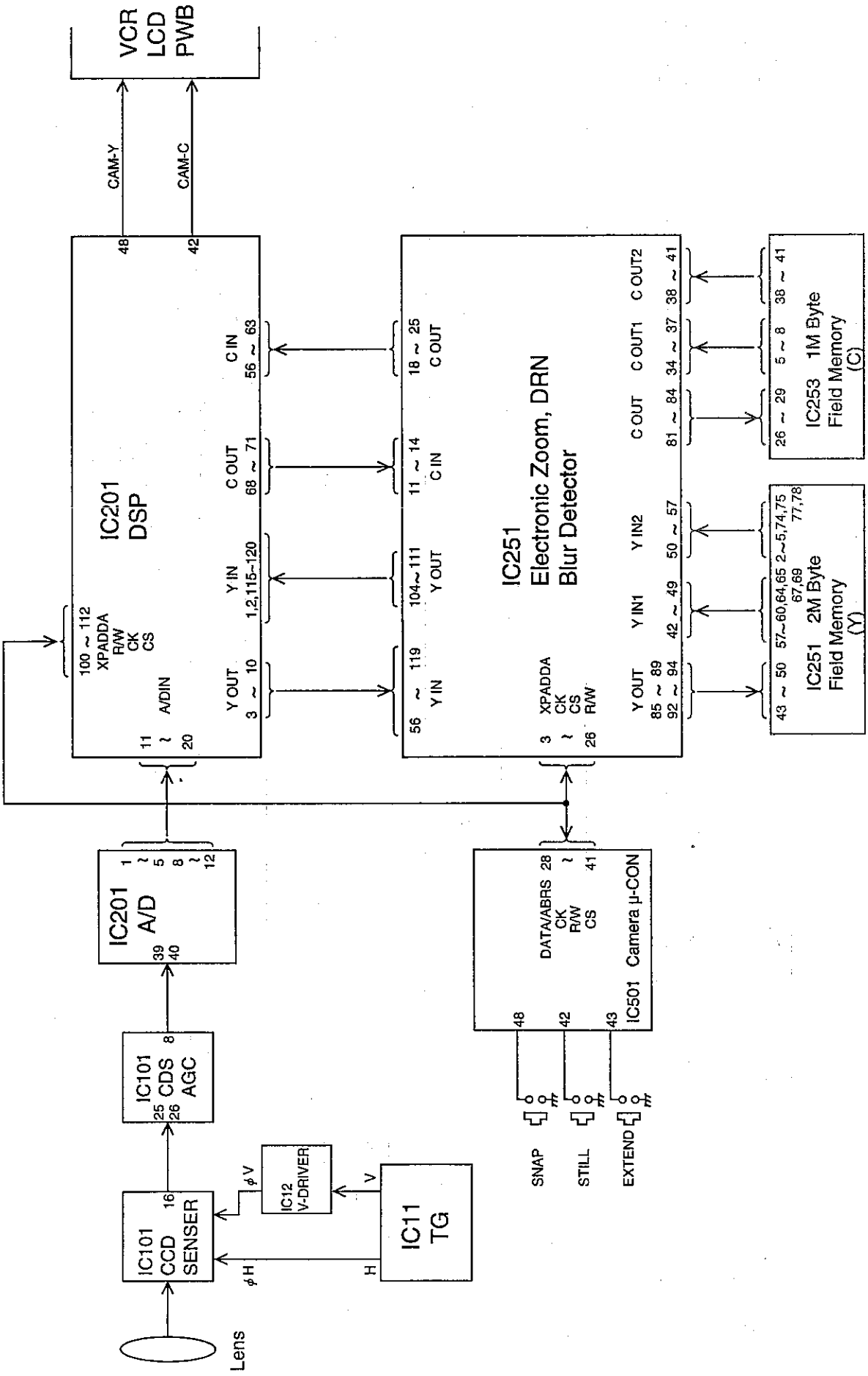
6-6. CROMA BLOCK DIAGRAM



6-7. RF CIRCUIT BLOCK DIAGRAM

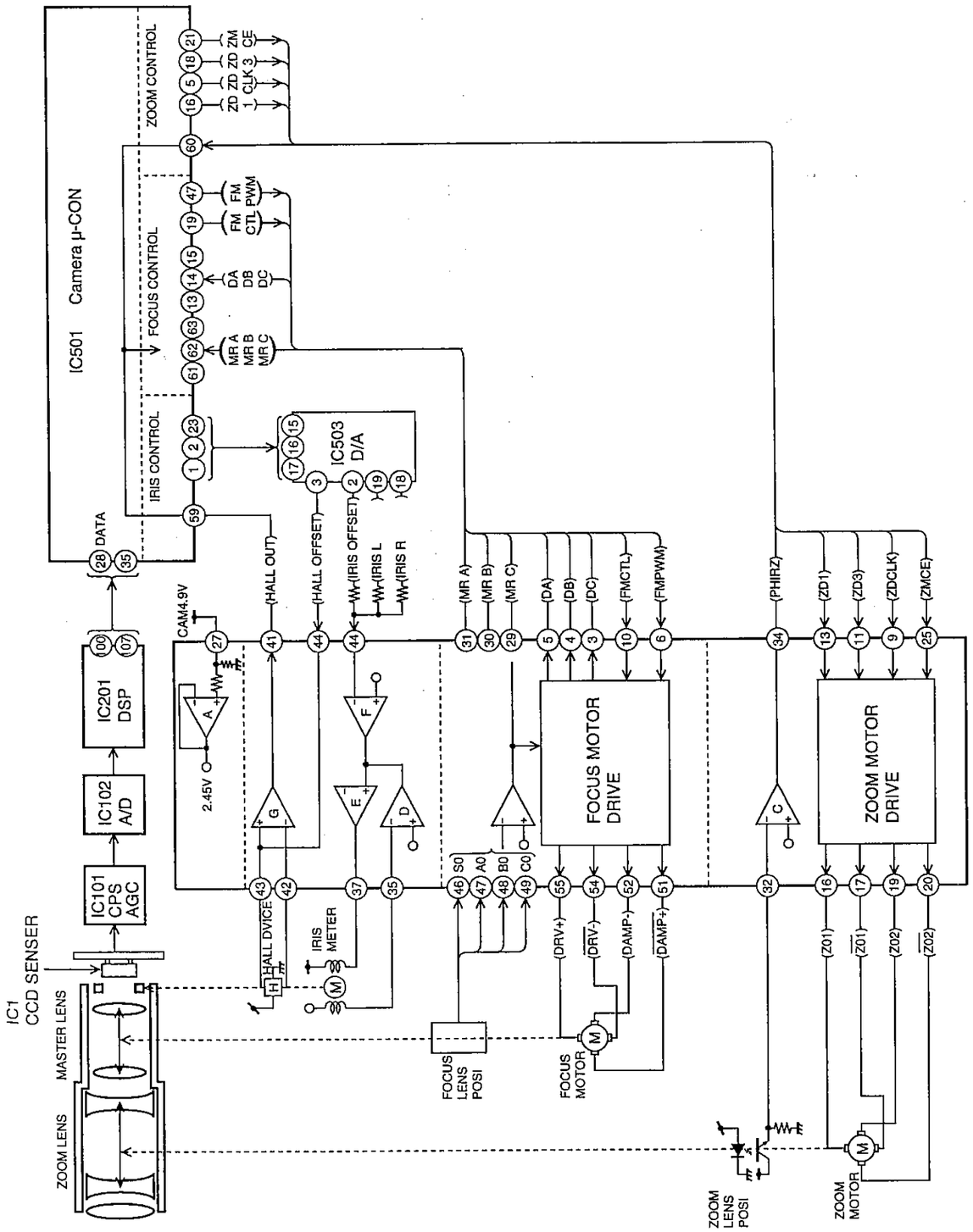


6-8. CAMERA SECTION BLOCK DIAGRAM



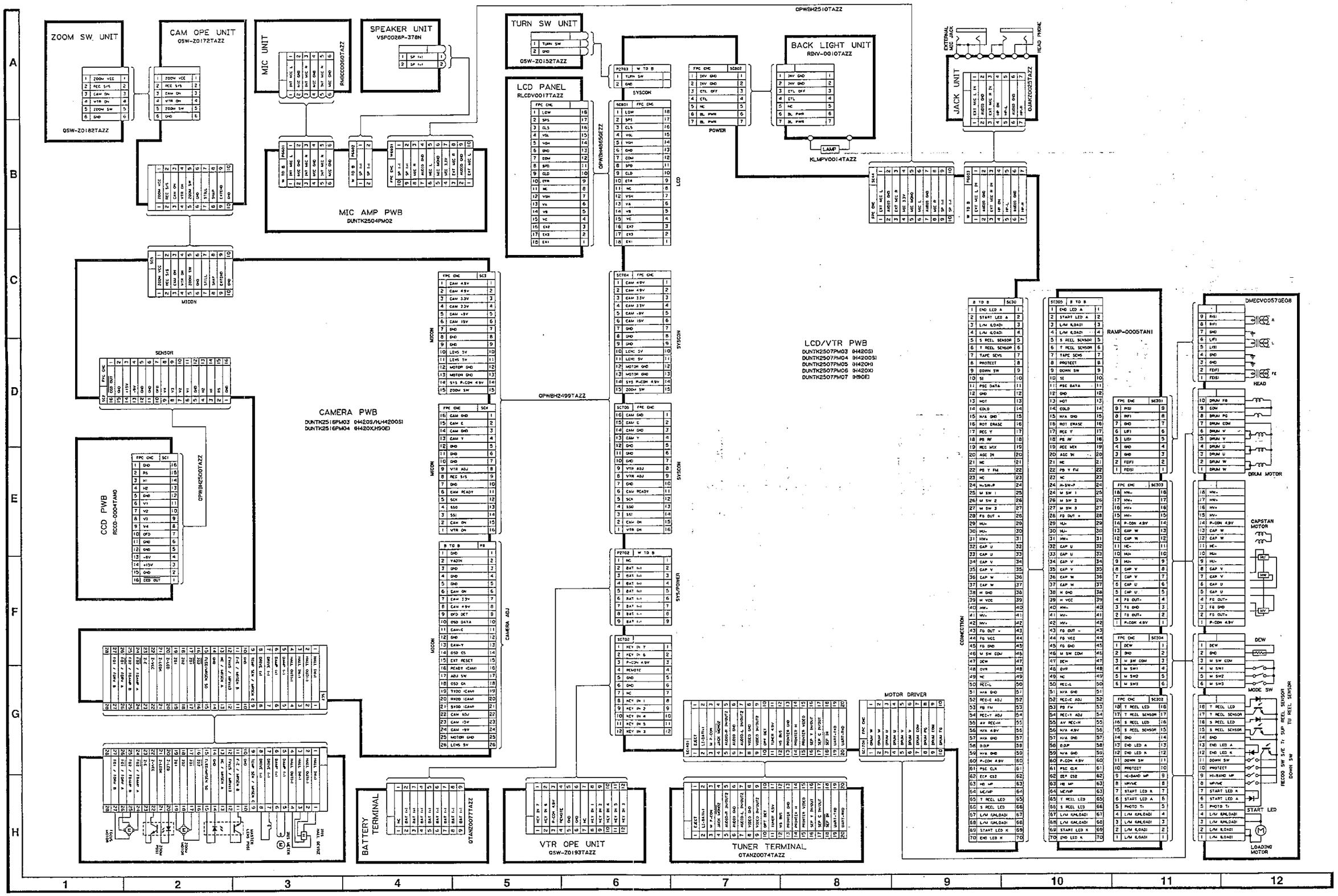
VL-H420S/H/X
VL-H4200S/H90E

6-9. LENS DRIVE BLOCK DIAGRAM



7-1. OVERALL SCHEMATIC DIAGRAM

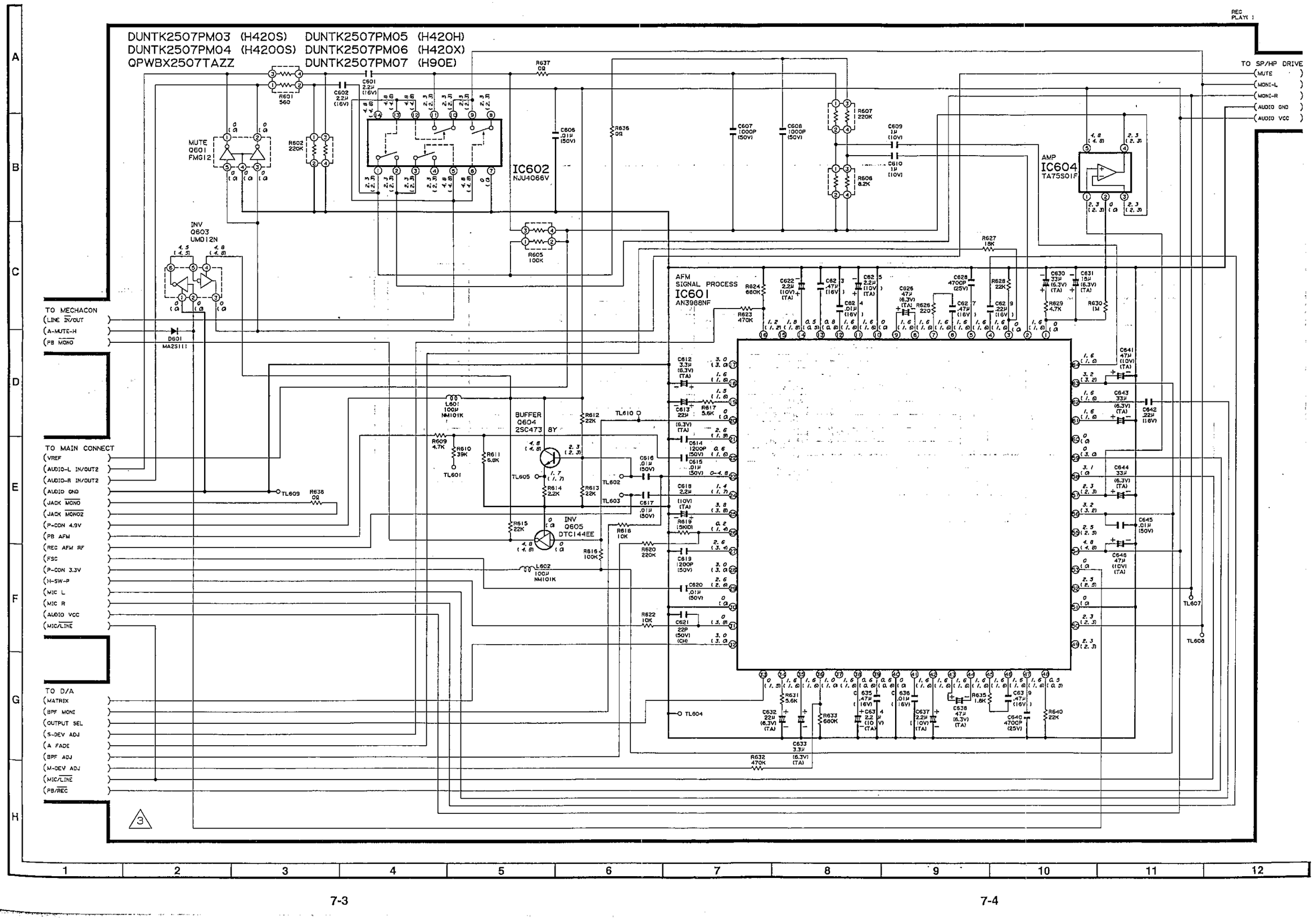
VL-H420S/H/X
VL-H4200S/H90E



7-2. AUDIO CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E



DUNTK2507PM03 (H450S)
DUNTK2507PM04 (H4200S) ③
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ

TO RF
- H/A GND
- REC Y
- PB RF
- REC MIX
- AGC IN
- H/A GND
- PB Y FM
- EE-L
- H/A GND
- REC-L
- H/A GND
- H/A 4.9V
- D.O.P

TO D/A
- REC-C ADJ
- REC-Y ADJ

B TO B

TL36	36	CAP W	← →	CAP V	35
TL38	37	CAP W	← →	CAP V	34
TL39	38	H GND	— →	CAP U	33
TL40	39	H VCC	← →	CAP U	32
TL41	40	HW-	← →	HW+	31
TL42	41	HV-	← →	HU-	30
TL43	42	HV+	← →	HU+	29
TL44	43	FG OUT -	← →	FG OUT +	28
TL45	44	FG VCC	← →	M SW 3	27
	45	FG GND	— →	M SW 2	26
TL47	46	M SW COM	→ →	M SW 1	25
TL48	47	DEW	→ →	H-SW-P	24
	48	OVR	→ →	EE-L	23
TL50	49	H/A GND	→ →	PB Y FM	22
	50	REC-L	→ →	H/A GND	21
TL52	51	H/A GND	→ →	AGC IN	20
	52	REC-C ADJ	→ →	REC MIX	19
TL54	53		→ →	PB RF	18
TL55	54	REC-Y ADJ	→ →	REC Y	17
TL56	55	AV REC-H	→ →	ROT ERASE	16
	56	H/A 4.9V	→ —	H/A GND	15
TL58	57	H/A GND	— →	COLD	14
	58	D.O.P	→ →	HOT	13
TL60	59	H/A GND	→ —	GND	12
TL61	60	P-CON 4.9V	→ →	PSC DATA	11
TL62	61	PSC CLK	→ →	SI	10
TL63	62	EEP CS2	→ →	CASCON SW	9
TL64	63	HB MP	→ →	PROTECT SW	8
TL65	64	ME/MP SW	→ →	TAPE SENS	7
TL66	65	T REEL LED	→ →	T REEL SENSOR	6
TL67	66	S REEL LED	→ →	S REEL SENSOR	5
	67	L/M (UNLOAD)	→ →	L/M (LOAD)	4
TL70	68	L/M (UNLOAD)	→ →	L/M (LOAD)	3
	69	START LED K	— →	START LED A	2
	70	END LED K	— →	END LED A	1

B TO B
P1
QCNCM7054TAZZ

TL35 TL33 TL31 TL30 TL29 TL28 TL27 TL26 TL25 TL24 TL23 TL22 TL20 TL19 TL18 TL17 TL16 TL15 TL14 TL13 TL12 TL11 TL10 TL9 TL8 TL7 TL6 TL5 TL4 TL2 TL1

TL74 TL75

TO MECHACON
- ROT ERASE
- H-SW-P
- OVR
- AV REC-H
- EEP CS2
- PSC CLK
- SI
- PSC DATA
- TAPE SENS
- START LED A
- END LED A
- P-CON 4.9V
- GND

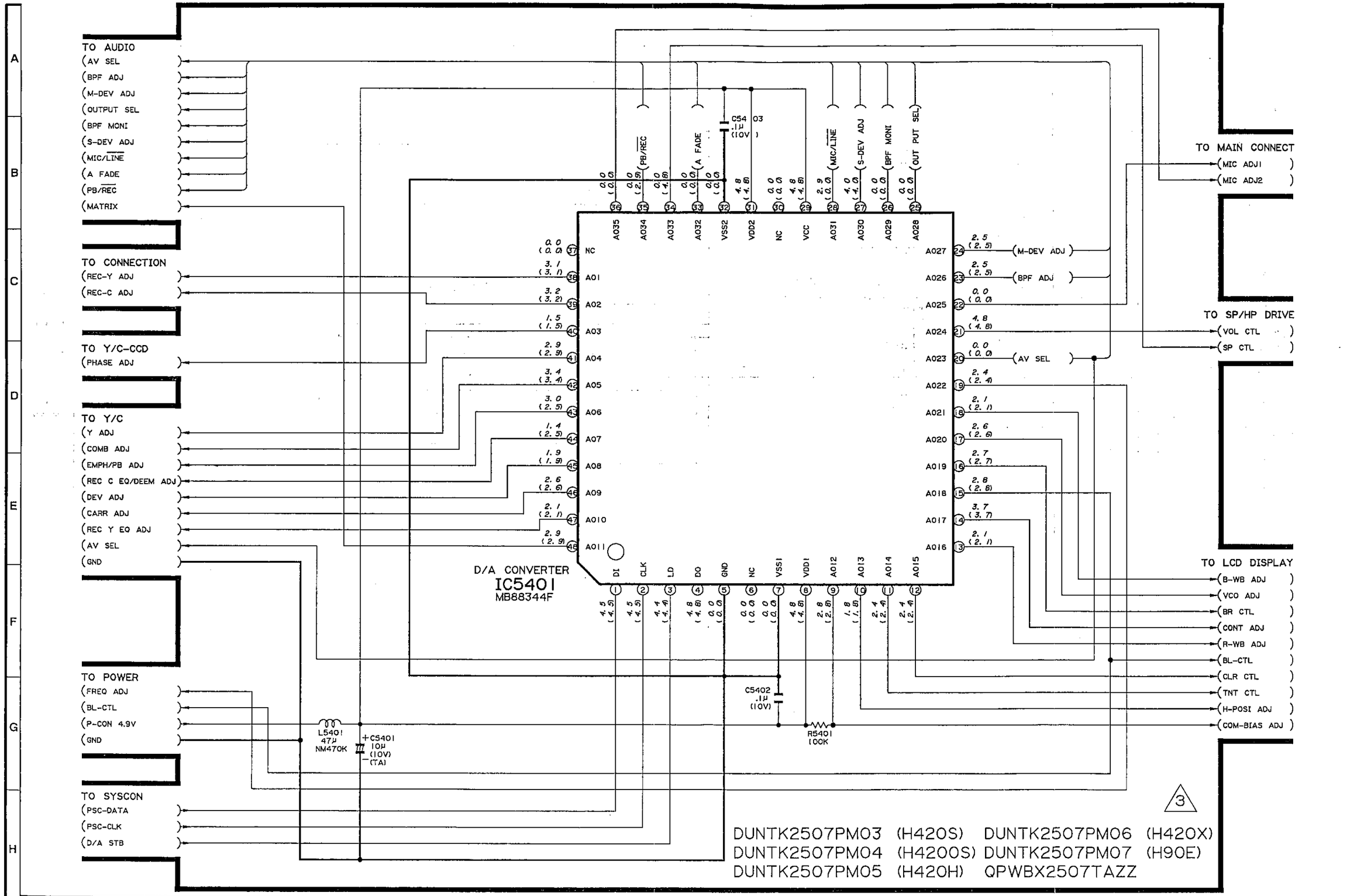
TO SYSCON
- DEW

TO MOTOR DRIVER
- FG VCC
- FG GND
- FG OUT +
- FG OUT -
- H VCC
- H GND
- HU +
- HU -
- HV+
- HV-
- HW+
- HW-
- CAP U
- CAP V
- CAP W
- M SW 1
- M SW 2
- M SW 3
- CASCON SW
- PROTECT SW
- HB MP
- ME/MP SW
- T REEL SENSOR
- S REEL SENSOR
- T REEL LED
- S REEL LED
- L/M (LOAD)
- L/M (UNLOAD)
- GND

7-4. D/A CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E



7-5. MOTOR DRIVE CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

DUNTK2507PM03 (H420S)
DUNTK2507PM04 (H4200S)
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ
△3

TO POWER
(CAP VS
(DRUM VS
(MEC 5V
(MEC GND

DRUM MOTOR DRIVER
IC1701
LB1688V

CAPSTAN MOTOR DRIVER
IC1702
LB1682V

LOADING MOTOR DRIVER
IC1703
LB1843V

SC1701
N1076TA
DRUM MOTOR

TO CONNECTION
(FG VCC
(FG OUT +
(FG GND
(FG OUT -
(CAP U
(CAP V
(HU -
(HU +
(H GND
(CAP W
(H VCC
(HV-
(HV+
(HW+
(HW-
(L/M (UNLOAD)
(L/M (LOAD)
(S REEL LED
(T REEL LED
(S REEL SENSOR
(T REEL SENSOR
(GND
(M SW 1
(M SW 2
(M SW 3
(HB MP
(ME/MP SW
(PROTECT SW
(CASCON SW

TO MECHACON
(CAP ON
(CAP FWD
(CAP FG
(DRUM ON
(DRUM REV
(DRUM PG
(DRUM FG
(L/M FOR
(L/M REV
(GND
(P-CON 4.5V
(S REEL SENSOR
(T REEL SENSOR
(M SW 1
(M SW 2
(M SW 3
(HB MP
(ME/MP SW
(PROTECT SW
(CASCON SW

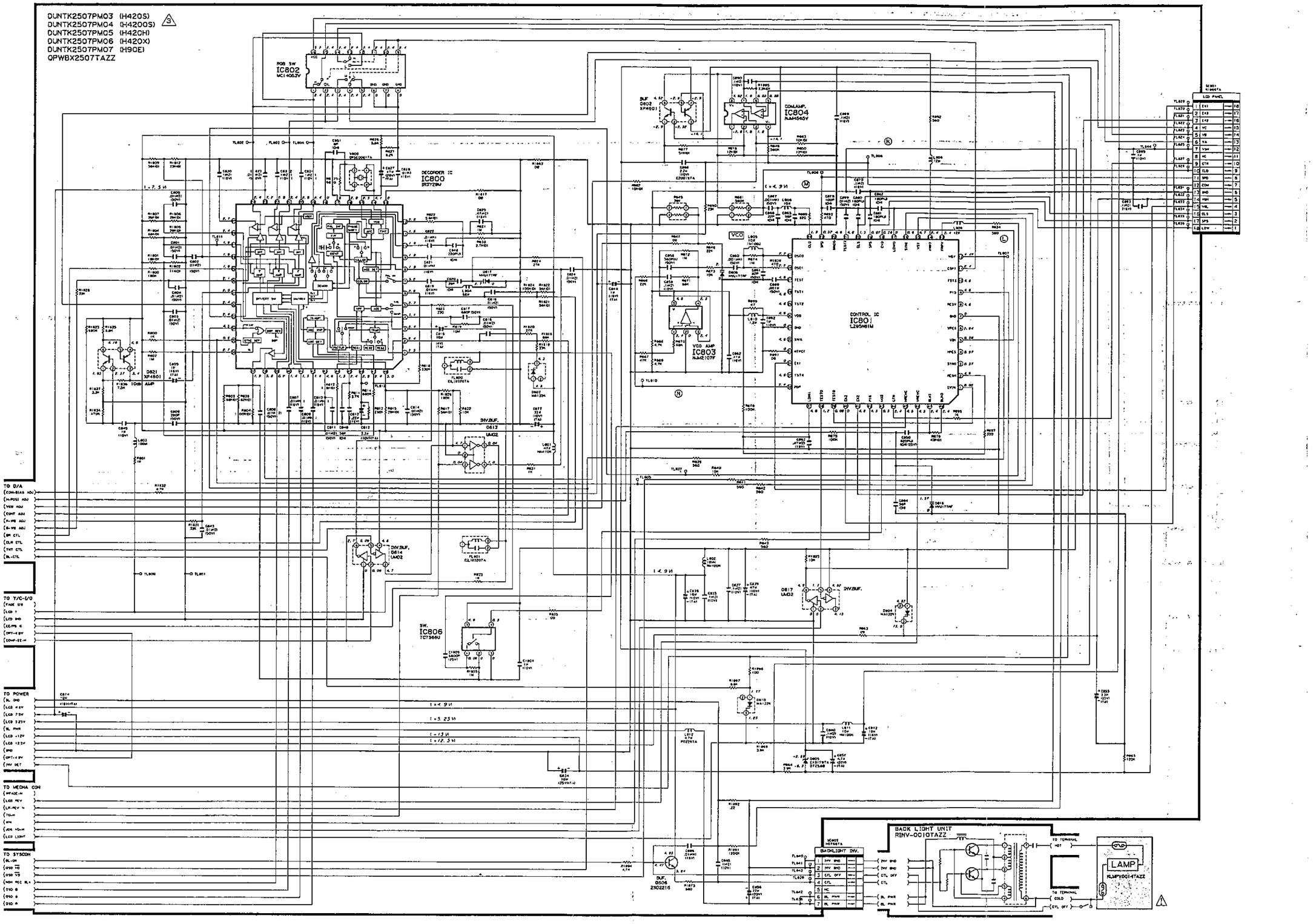
7-6. LCD DISPLAY CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

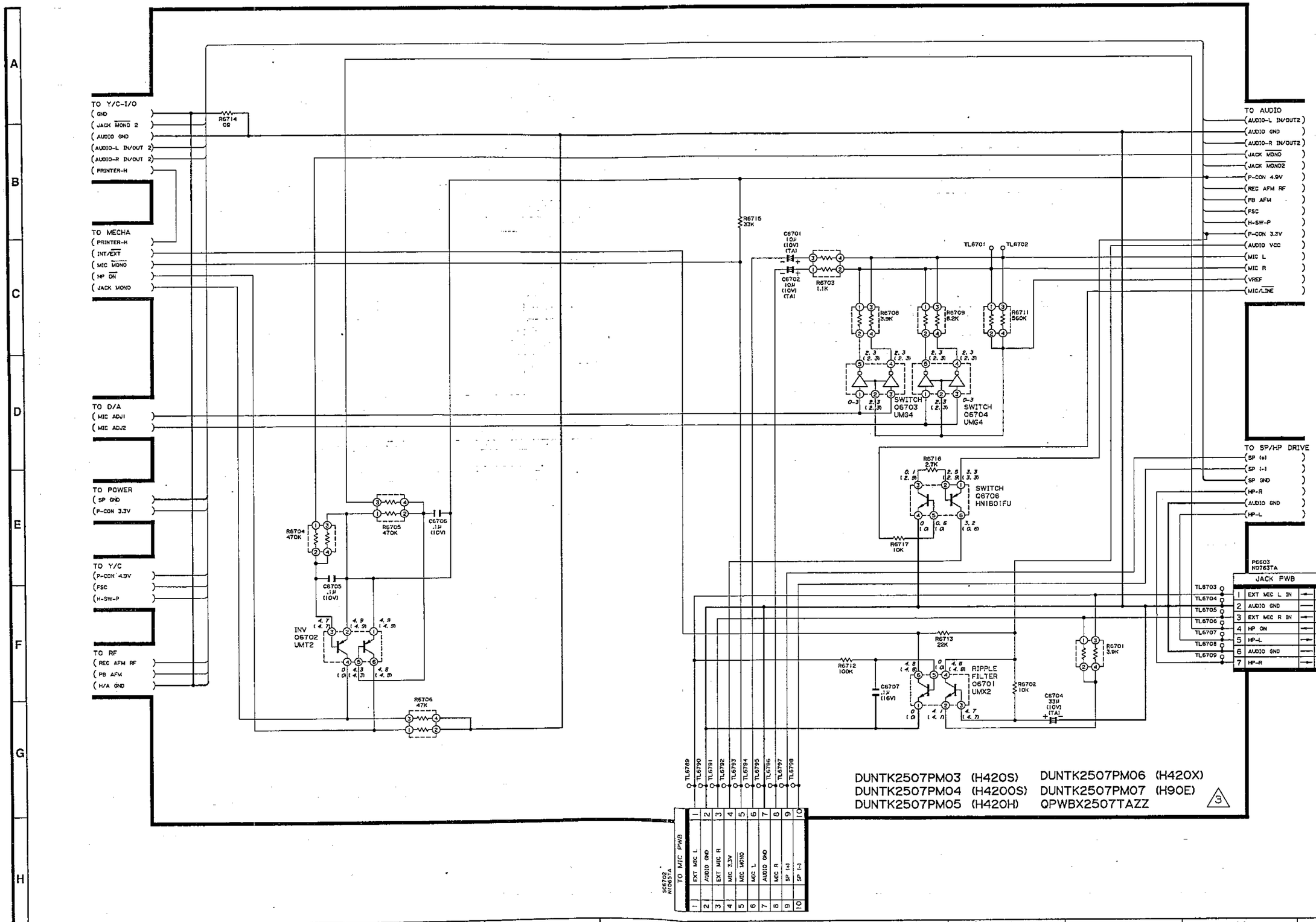
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

DUNTK2507PM03 (H420S) ⚠3
DUNTK2507PM04 (H4200S)
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ



7-7. MAIN CONNECTOR CIRCUIT SCHEMATIC DIAGRAM

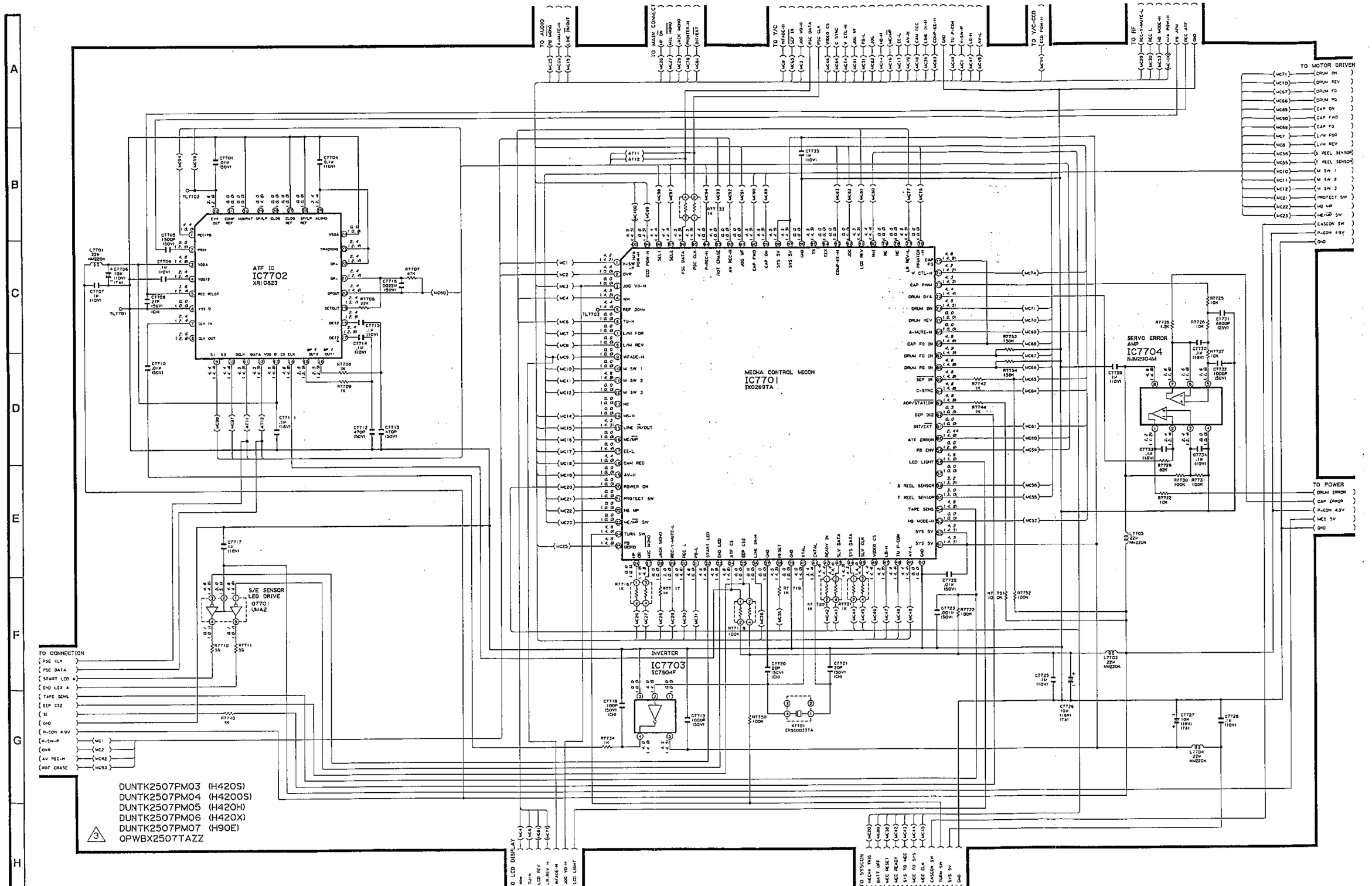
VL-H420S/H/X
VL-H4200S/H90E



7-8. MECHACON CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

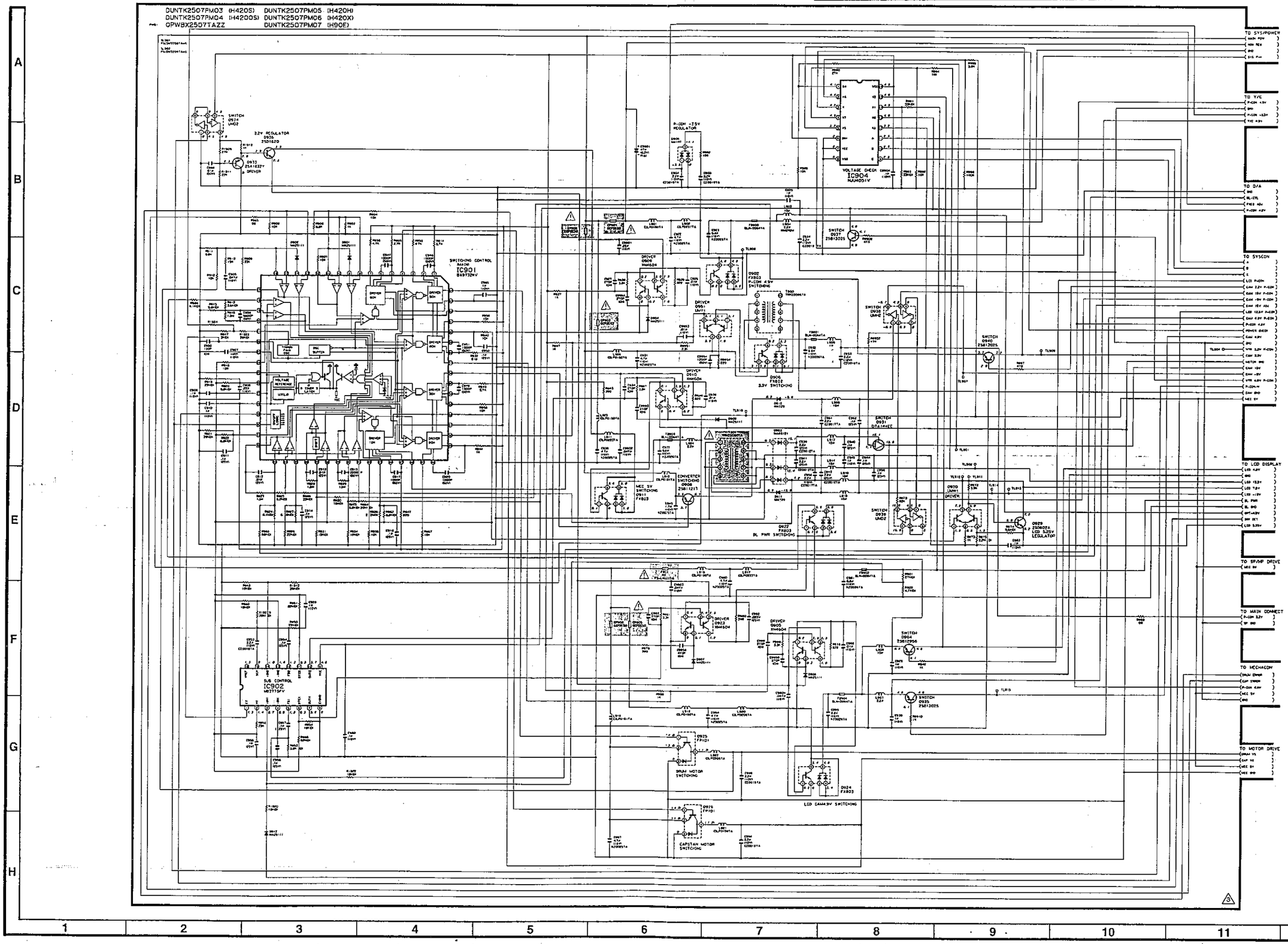


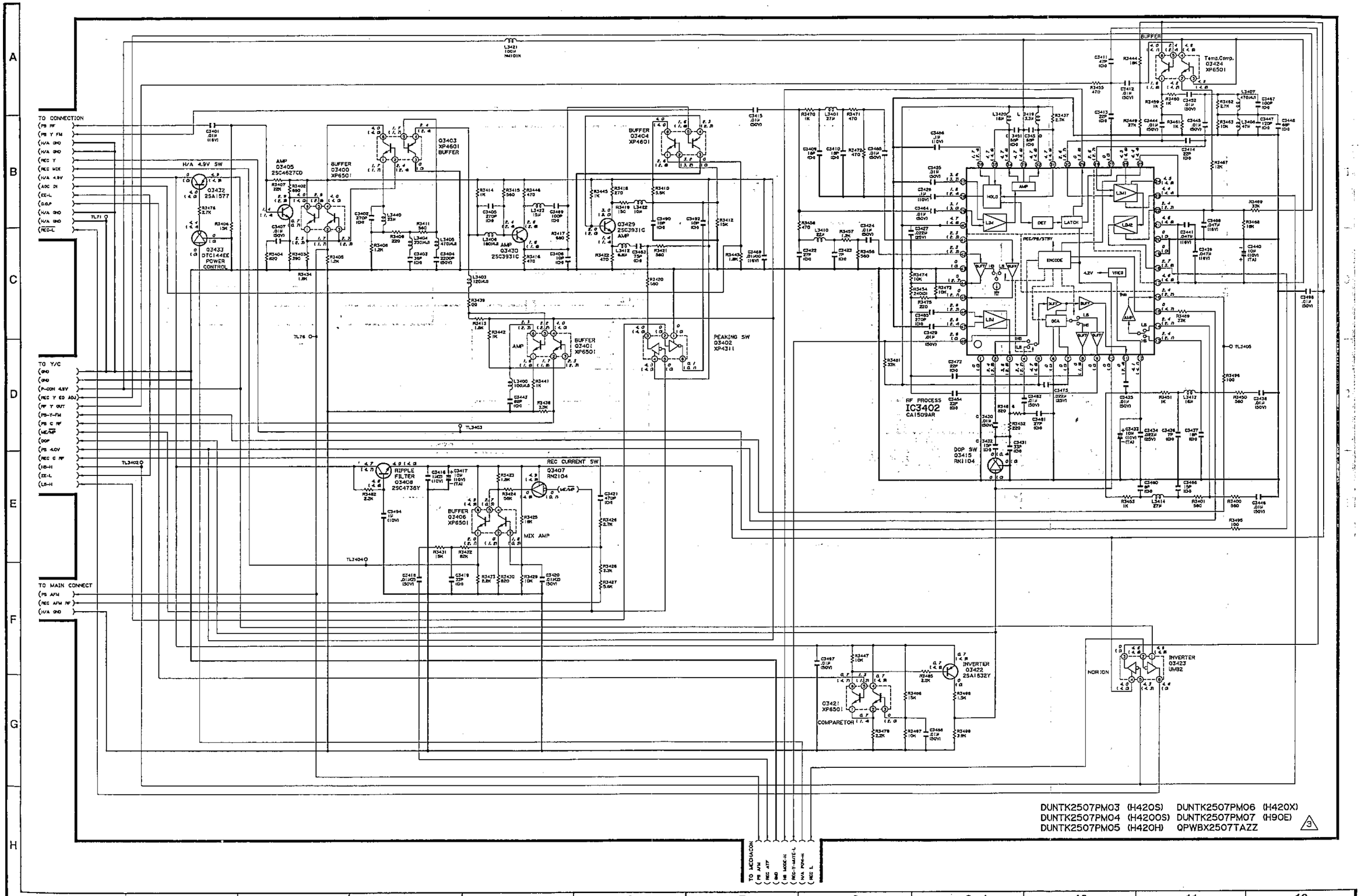
7-9. POWER CIRCUIT SCHEMATIC DIAGRAM

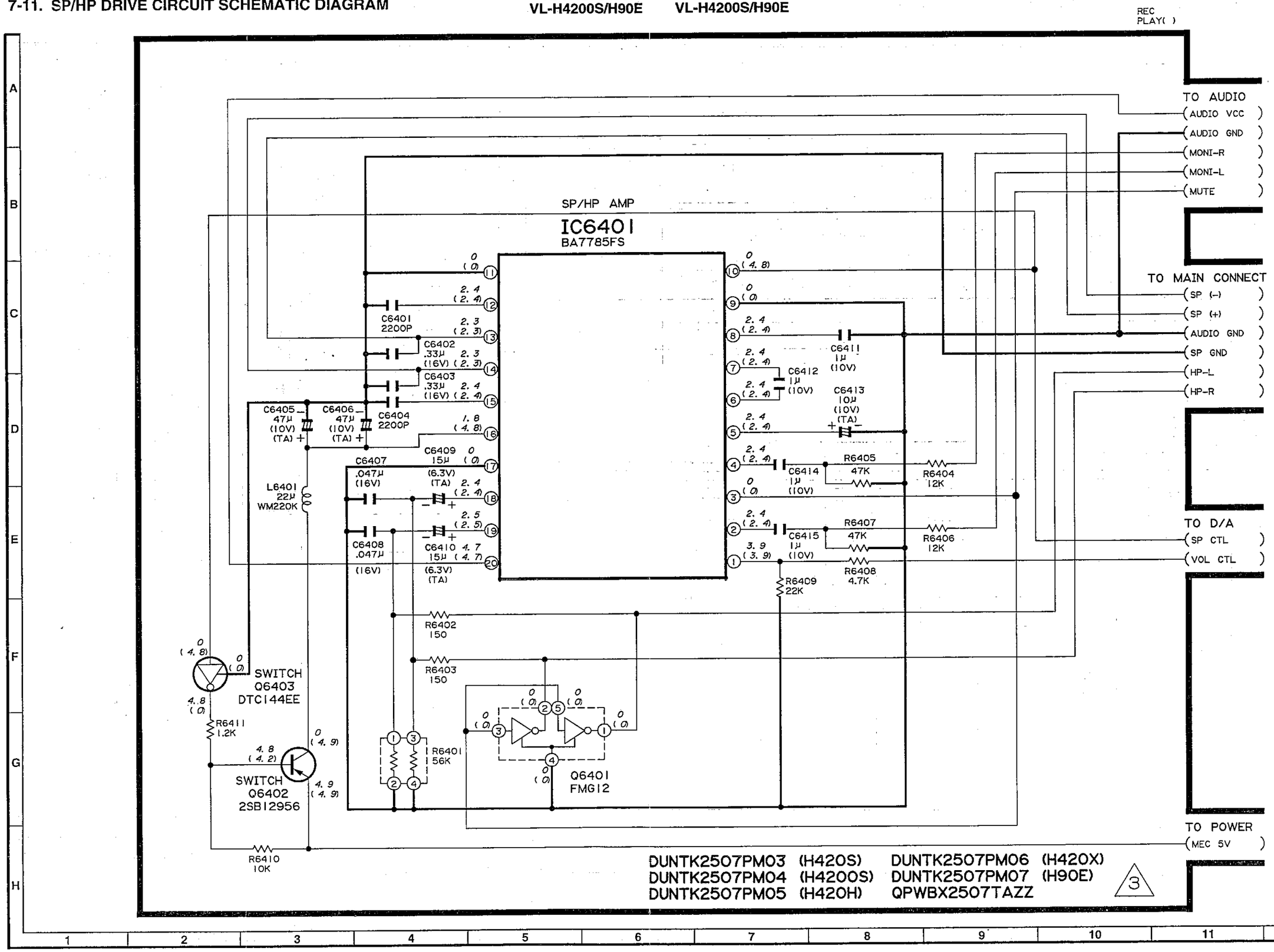
VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

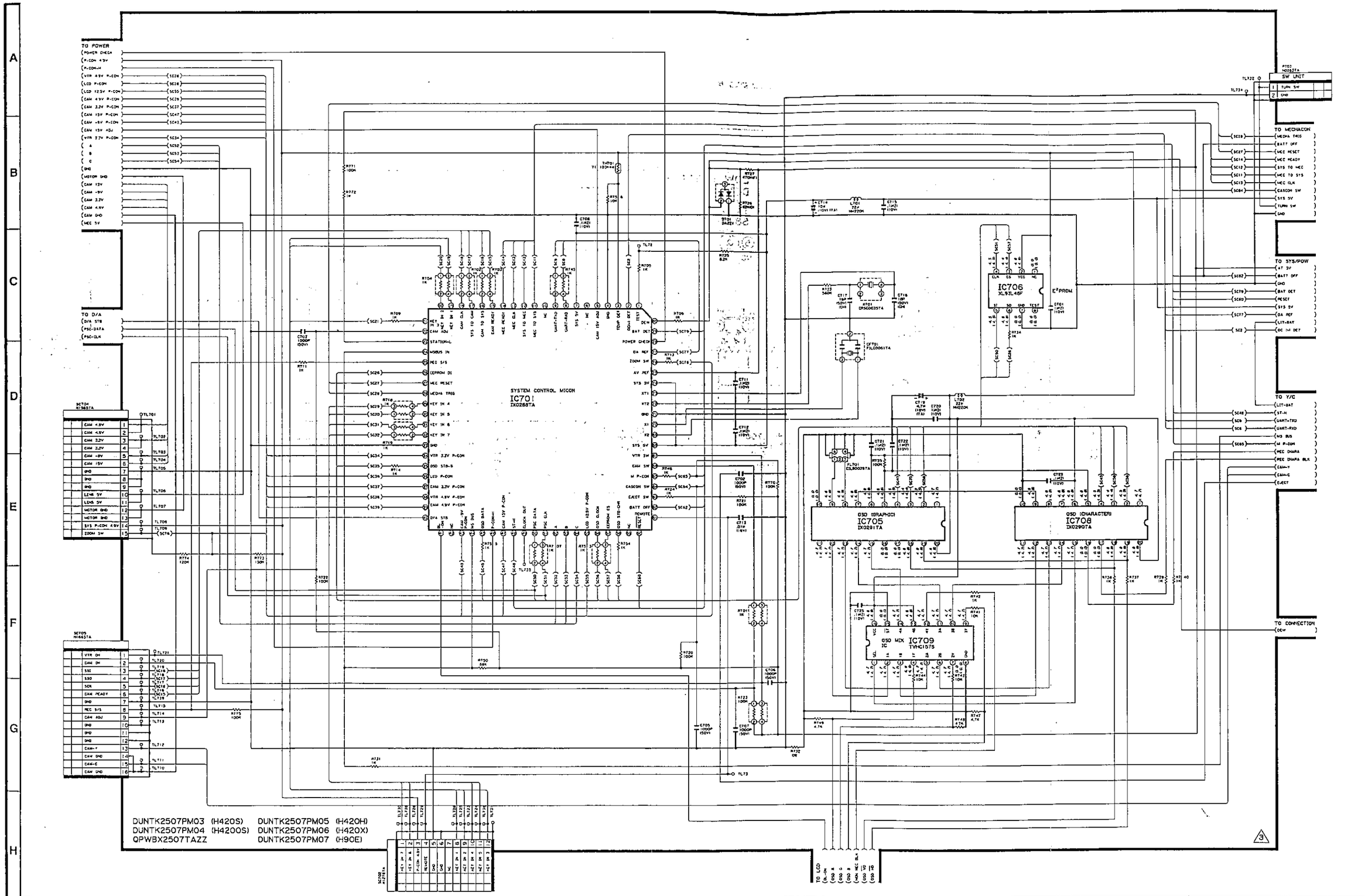


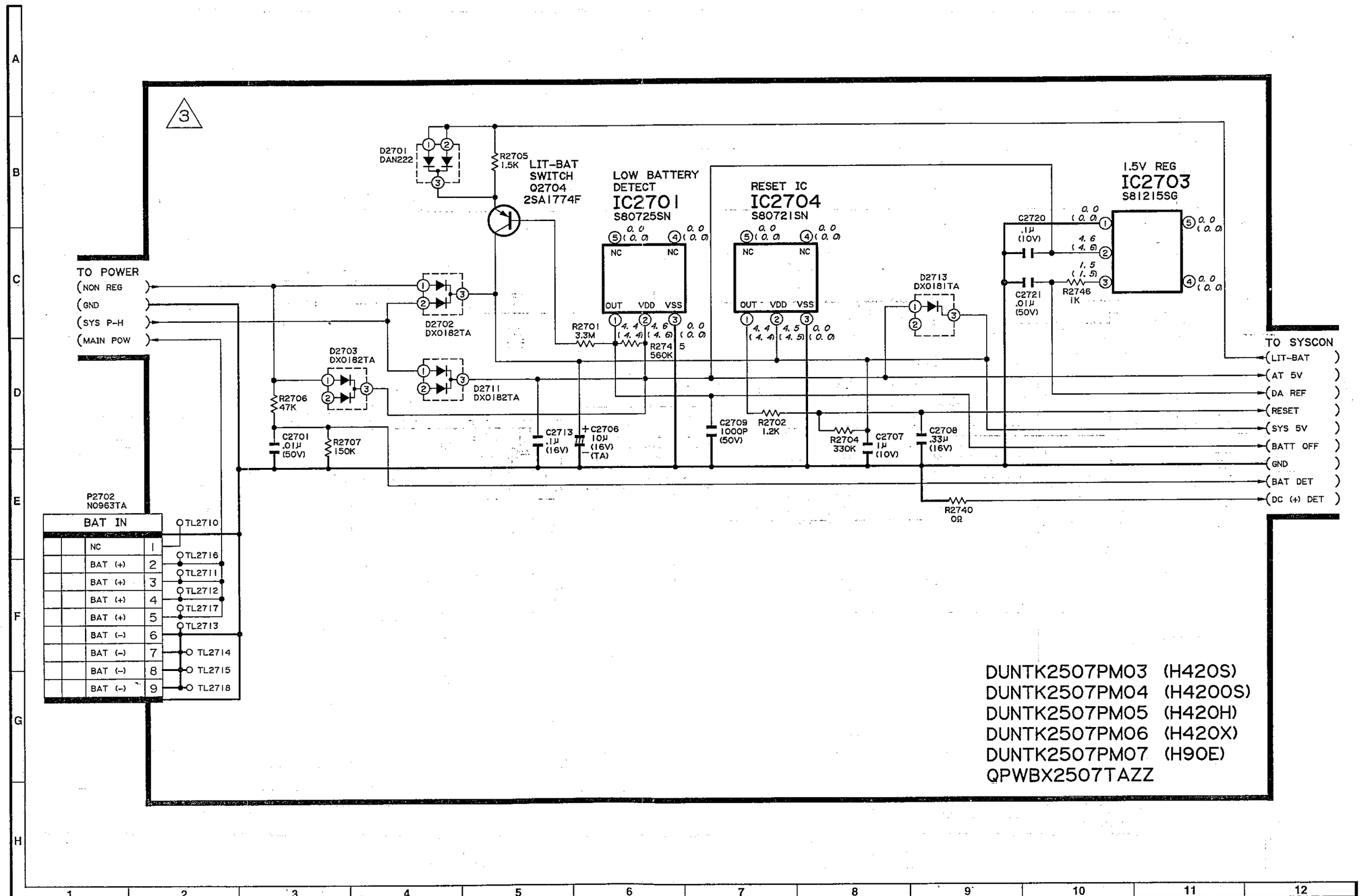

TO CONNECTION
H/A 4.9V SW
AMP 03405 2SC4627CD
BUFFER 03400 XP6501
03403 XP4601 BUFFER
BUFFER 03404 XP4601
03429 2SC3931C AMP
03430 2SC3931C AMP
03432 2SA1577
03433 DTC144EE POWER CONTROL
PEAKING SW 03402 XP4311
BUFFER 03401 XP6501
Tema.Comp. 03424 XP6501
RF PROCESS IC3402 CA1509AR
DOP SW Q3415 RN1104
REC CURRENT SW
Q3407 RN2104
RIPPLE FILTER Q3408 2SC4736Y
BUFFER Q3406 XP6501
MIX AMP
TO Y/C
TO MAIN CONNECT
INVERTER 03422 2SA1832Y
Q3421 XP6501
COMPARETOR
INVERTER 03423 UN92
NOR ION
TO MECHACON
DUNTK2507PM03 (H420S) DUNTK2507PM06 (H420X)
DUNTK2507PM04 (H4200S) DUNTK2507PM07 (H90E)
DUNTK2507PM05 (H420H) QPWBX2507TAZZ
3


REC
PLAY( )
TO AUDIO
AUDIO VCC
AUDIO GND
MONI-R
MONI-L
MUTE
TO MAIN CONNECT
SP (-)
SP (+)
AUDIO GND
SP GND
HP-L
HP-R
TO D/A
SP CTL
VOL CTL
TO POWER
MEC 5V
SP/HP AMP
IC6401
BA7785FS
C6401 2200P
C6402 .33µ (16V)
C6403 .33µ (16V)
C6404 2200P
C6405 47µ (10V) (TA)
C6406 47µ (10V) (TA)
C6407 .047µ (16V)
C6408 .047µ (16V)
C6409 15µ (6.3V) (TA)
C6410 15µ (6.3V) (TA)
C6411 1µ (10V)
C6412 1µ (10V)
C6413 10µ (10V) (TA)
C6414 1µ (10V)
C6415 1µ (10V)
L6401 22µ WM220K
R6401 56K
R6402 150
R6403 150
R6404 12K
R6405 47K
R6406 12K
R6407 47K
R6408 4.7K
R6409 22K
R6410 10K
R6411 1.2K
SWITCH Q6403 DTC144EE
SWITCH Q6402 2SB12956
Q6401 FMG12
DUNTK2507PM03 (H420S)
DUNTK2507PM04 (H4200S)
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ
3

7-12. SYSCON CIRCUIT SCHEMATIC DIAGRAM

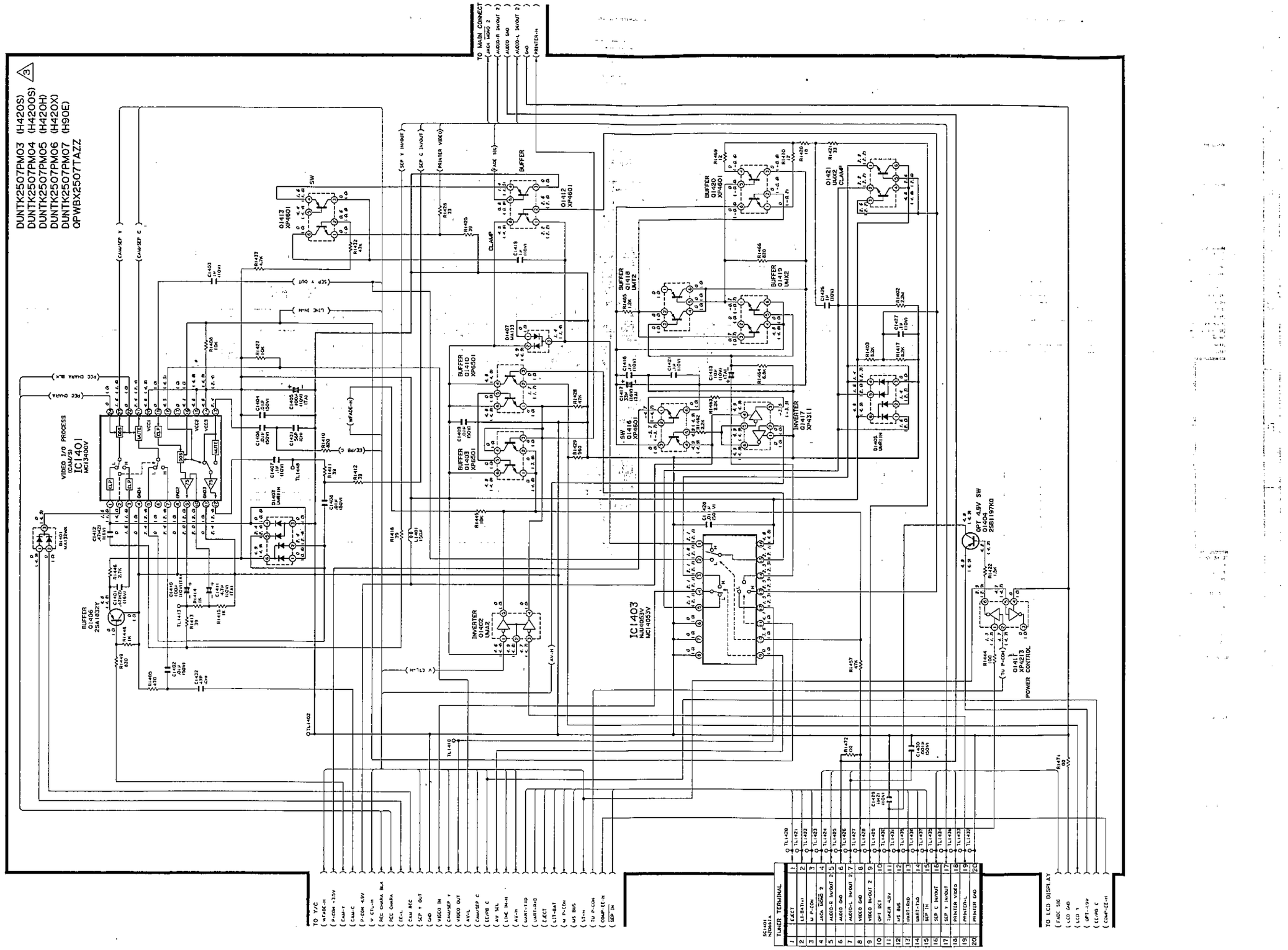
VL-H420S/H/X
VL-H4200S/H90E




3
D2701
DAN222
R2705
1.5K
LIT-BAT
SWITCH
Q2704
2SA1774F
LOW BATTERY
DETECT
IC2701
S80725SN
RESET IC
IC2704
S80721SN
1.5V REG
IC2703
S81215SG
NC
OUT
VDD
VSS
C2720
.1μ
(10V)
C2721
.01μ
(50V)
R2746
1K
D2713
DX0181TA
TO POWER
NON REG
GND
SYS P-H
MAIN POW
D2702
DX0182TA
D2703
DX0182TA
D2711
DX0182TA
R2701
3.3M
R2745
560K
R2706
47K
C2701
.01μ
(50V)
R2707
150K
C2713
.1μ
(16V)
C2706
10μ
(16V)
(TA)
C2709
1000P
(50V)
R2702
1.2K
R2704
330K
C2707
1μ
(10V)
C2708
.33μ
(16V)
TO SYSCON
LIT-BAT
AT 5V
DA REF
RESET
SYS 5V
BATT OFF
GND
BAT DET
DC (+) DET
R2740
0Ω
P2702
N0963TA
BAT IN
NC 1
BAT (+) 2
BAT (+) 3
BAT (+) 4
BAT (+) 5
BAT (–) 6
BAT (–) 7
BAT (–) 8
BAT (–) 9
TL2710
TL2716
TL2711
TL2712
TL2717
TL2713
TL2714
TL2715
TL2718
DUNTK2507PM03 (H420S)
DUNTK2507PM04 (H4200S)
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ

7-14. Y/C-I/O CIRCUIT SCHEMATIC DIAGRAM

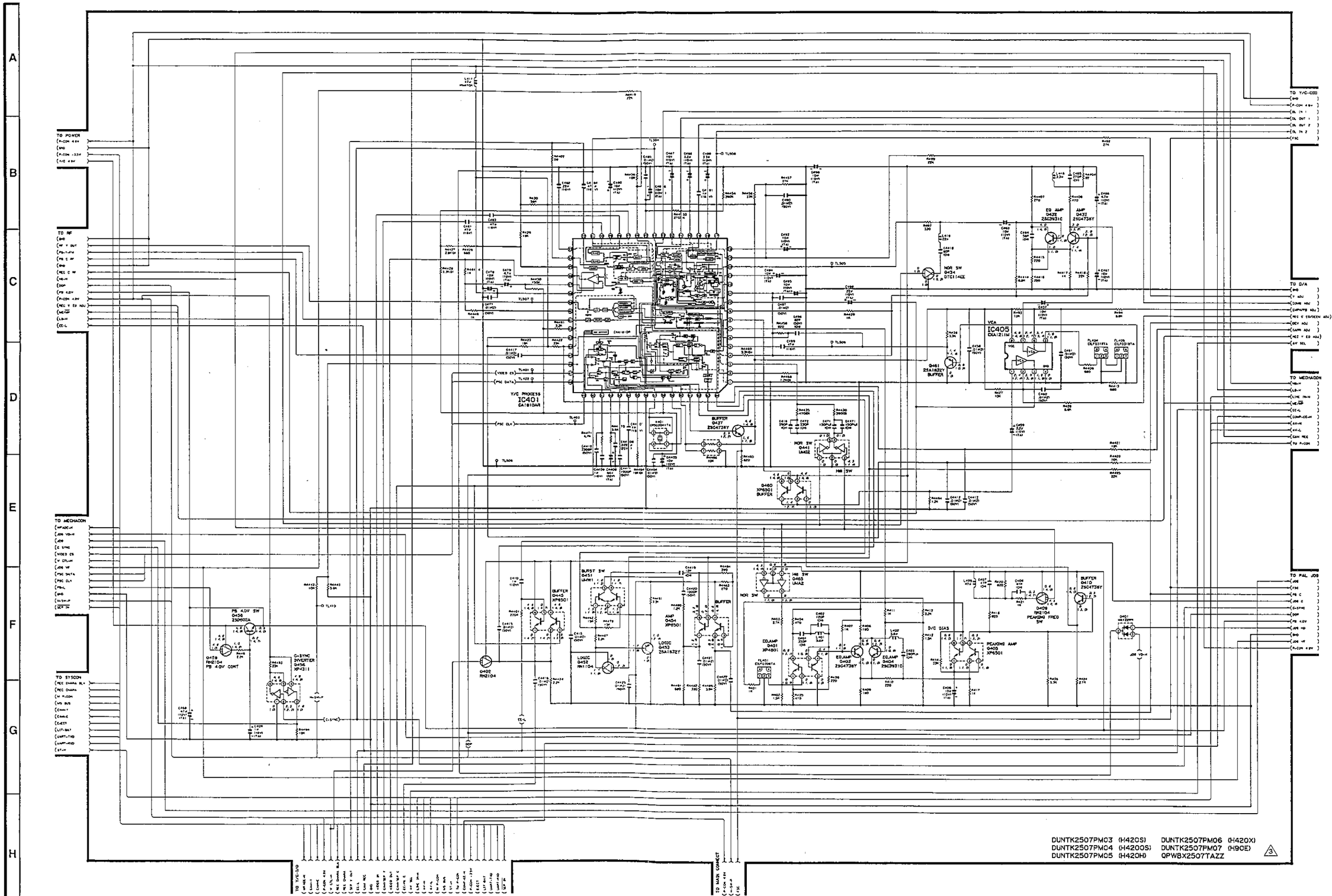
VL-H420S/H/X
VL-H4200S/H90E



7-15. Y/C CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E



DUNTK2507PM03 (H420S) DUNTK2507PM05 (H420H)
DUNTK2507PM04 (H4200S) DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ
3

IH CCD DELAY (COMB)
IC403
CXL5517N

IH CCD DELAY (DOC Y-CORRE DET. LNC)
IC404
CXL5517N

PLL
AUTO-BIAS
DRIVER
TIMING
CLAMP
CCD(1698bit)
BIAS
OUTPUT
OUTPUT

BUFFER
Q428
2SC4738Y

AMP
Q429
2SA1832Y

FL403
CILF0312TA

CCD POWER SAVE SW.
Q416
2SA1577

POWER CONTROL
Q414
RN1104

BUFFER
Q423
2SC4738Y

AMP
Q424
2SC3931C

BUFFER
Q449
2SC4738Y

AMP
Q425
2SC4738Y

FL402
CILF0312TA

D403
HVU17TRF

TH401
20234
2K
NTA

TO D/A
(PHASE ADJ)

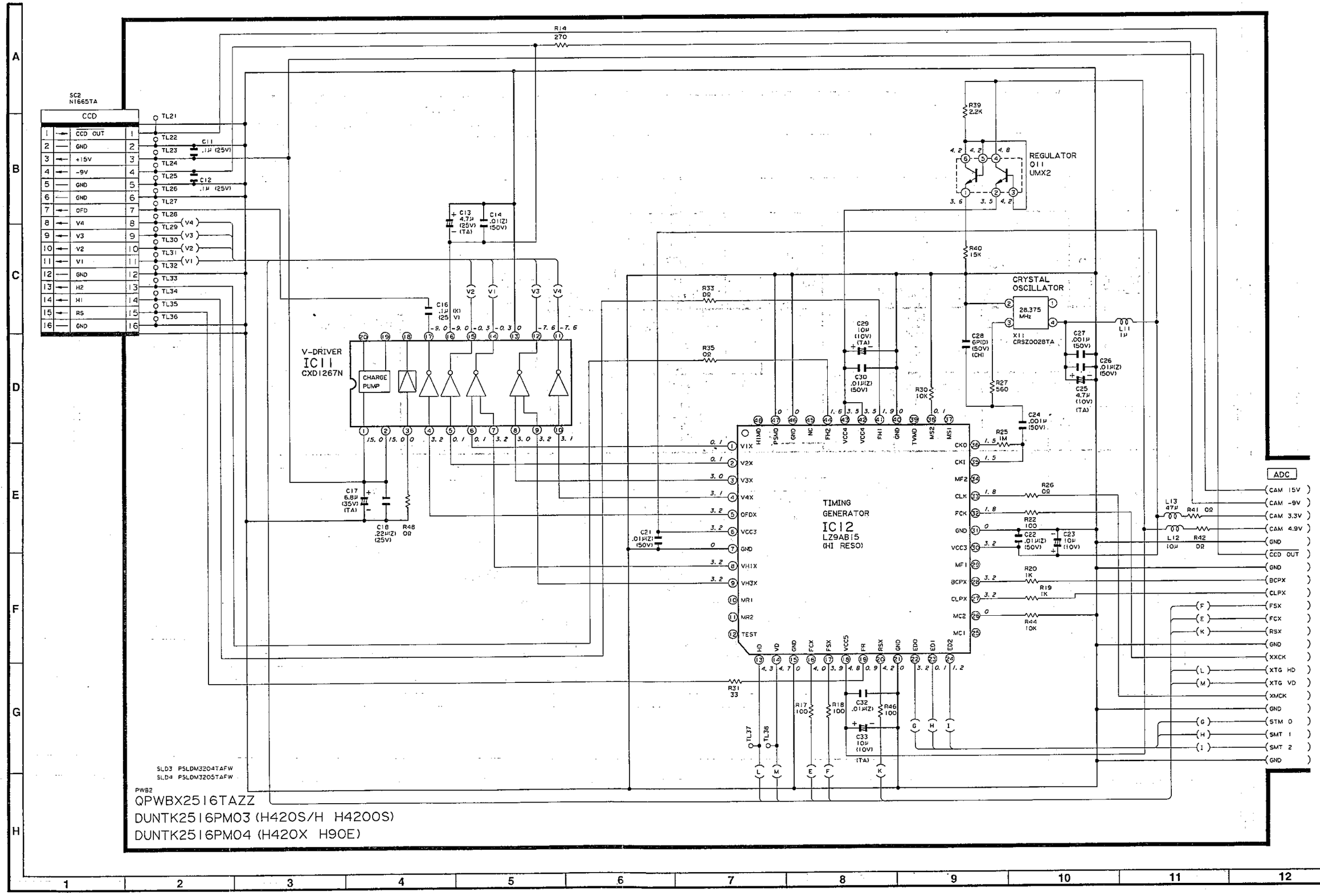
TO Y/C
(DL OUT 2)
(FSC)
(DL IN 2)
(GND)
(P-CON 4.9V)
(DL IN 1)
(DL OUT 1)

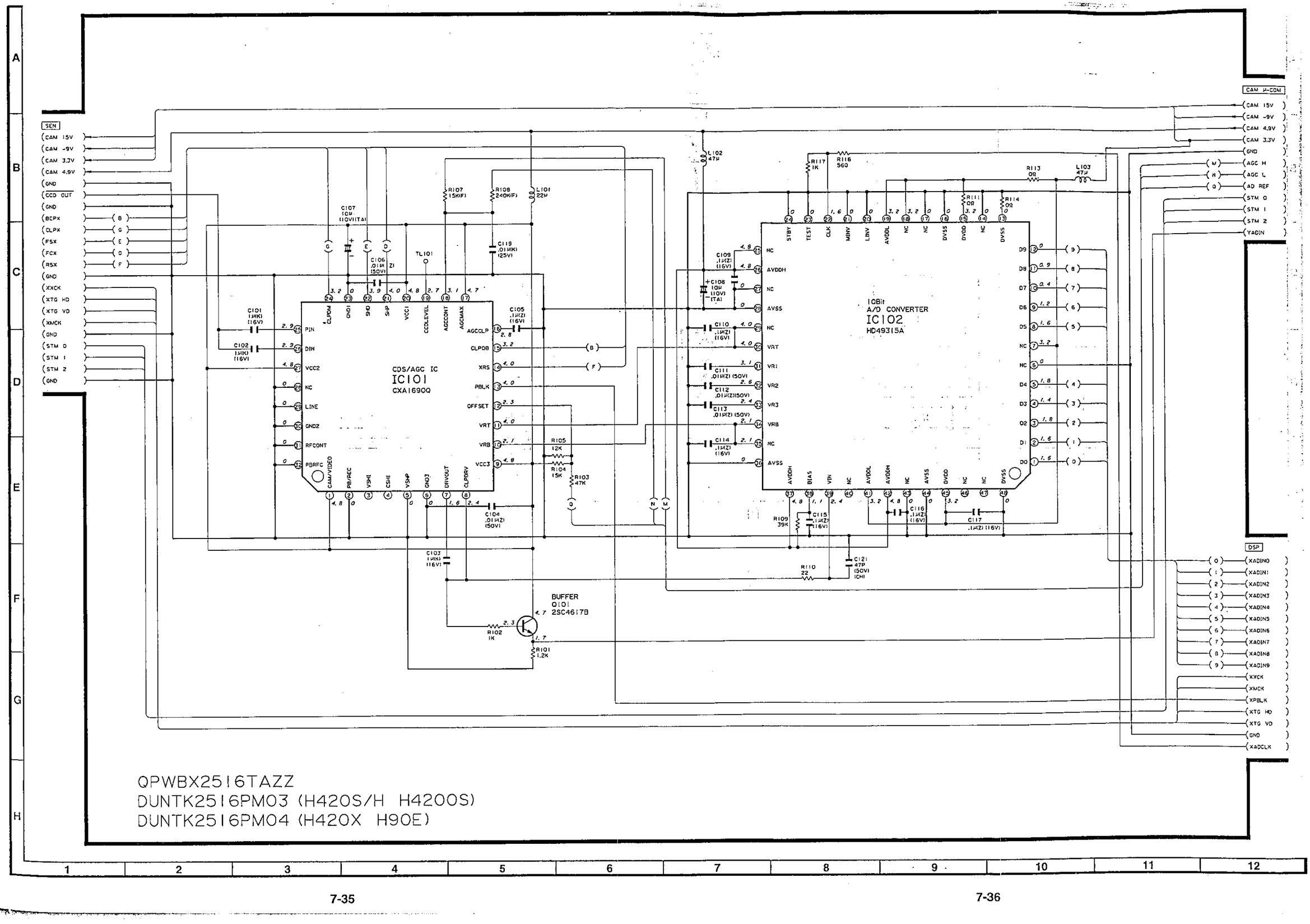
TO MECHACON
(CCD POW-H)

7-17. SENSOR CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

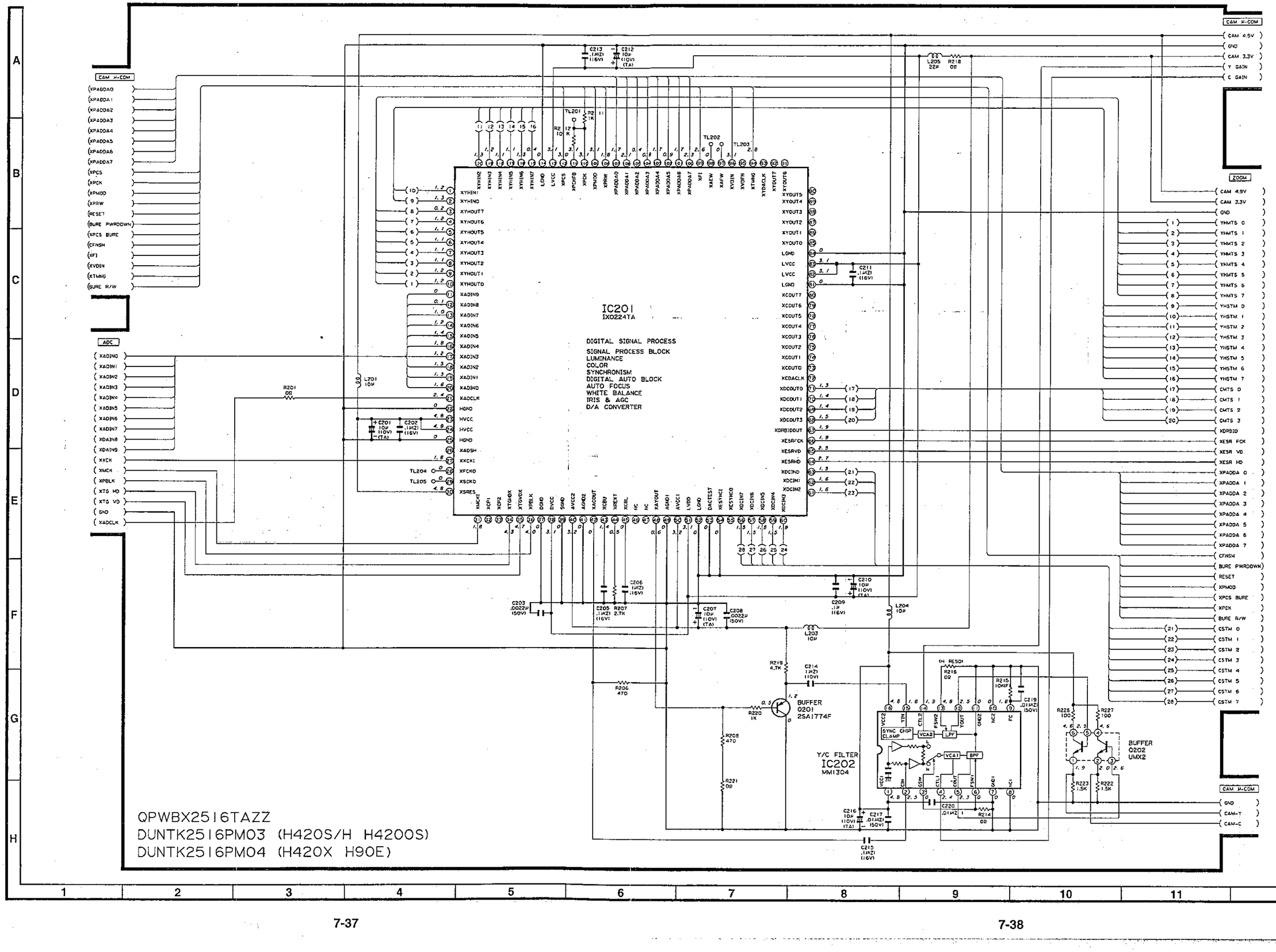



SEN
CAM 15V
CAM -9V
CAM 3.3V
CAM 4.9V
GND
CCD OUT
GND
BCPX
CLPX
FSX
FCX
RSX
GND
XXCK
XTG HD
XTG VD
XMCK
GND
STM 0
STM 1
STM 2
GND
CDS/AGC IC
IC101
CXA1690Q
PIN
DIN
VCC2
NC
LINE
GND2
RFCONT
PBRFC
CAM/VIDEO
PB/REC
VSHI
CSHI
VSHP
GND3
DRVOUT
CLPDRV
CLPDM
GND1
SHD
SHP
VCC1
CCDLEVEL
AGCCONT
AGCMAX
AGCCLP
CLPOB
XRS
PBLK
OFFSET
VRT
VRB
VCC3
BUFFER
Q101
2SC4617B
10Bit
A/D CONVERTER
IC102
HD49315A
NC
AVDDH
AVSS
VRT
VR1
VR2
VR3
VRB
BIAS
VIN
AVDDL
STBY
TEST
CLK
MINV
LINV
DVSS
DVDD
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
CAM μ-COM
CAM 15V
CAM -9V
CAM 4.9V
CAM 3.3V
GND
AGC H
AGC L
AD REF
STM 0
STM 1
STM 2
YADIN
DSP
XADIN0
XADIN1
XADIN2
XADIN3
XADIN4
XADIN5
XADIN6
XADIN7
XADIN8
XADIN9
XXCK
XMCK
XPBLK
XTG HD
XTG VD
GND
XADCLK
QPWBX2516TAZZ
DUNTK2516PM03 (H420S/H H4200S)
DUNTK2516PM04 (H420X H90E)

7-19. DSP CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

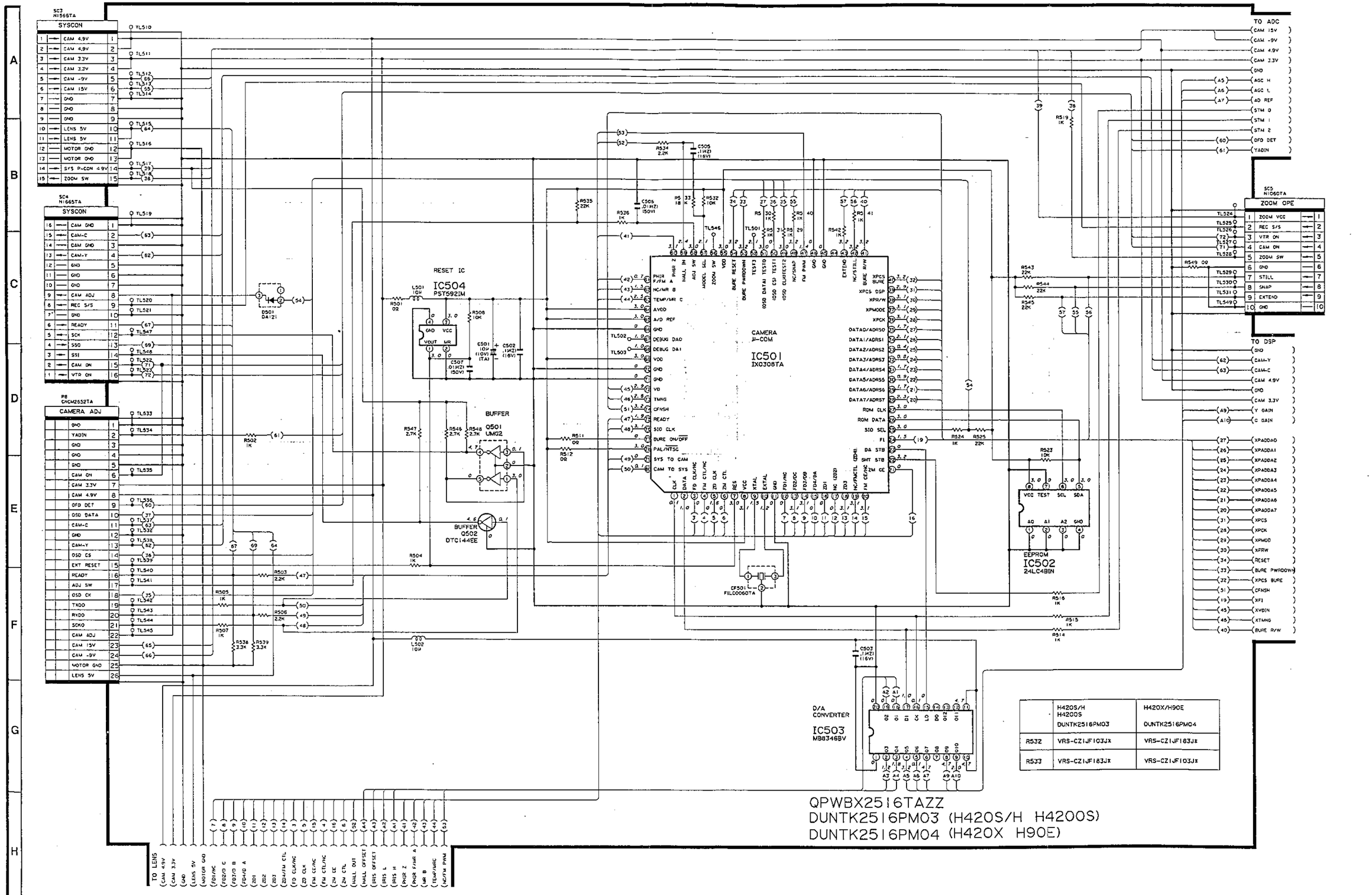
VL-H420S/H/X
VL-H4200S/H90E



7-20. CAMμ-COM CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E



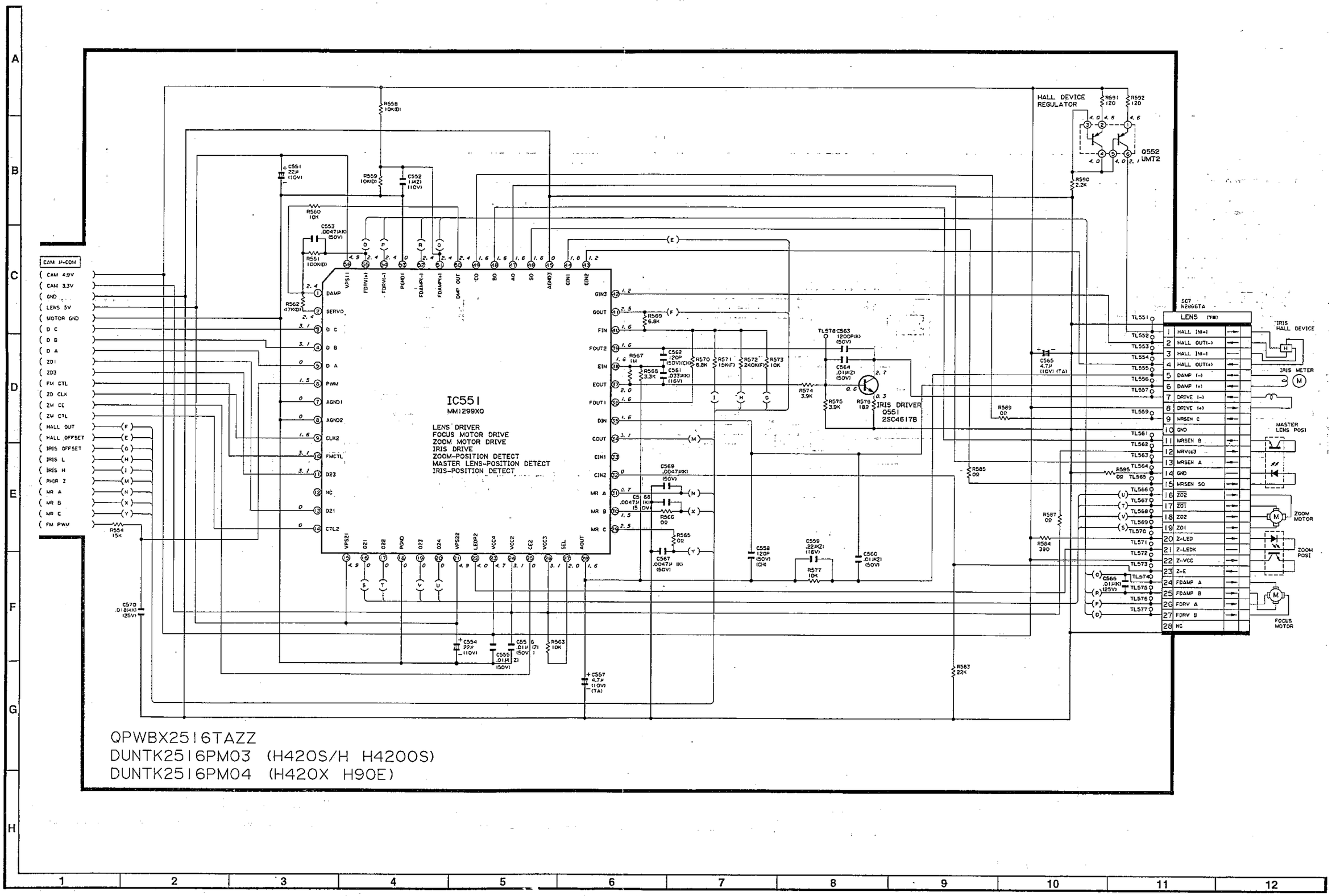
	H420S/H H4200S DUNTK2516PM03	H420X/H90E DUNTK2516PM04
R532	VRS-CZ1JF103J*	VRS-CZ1JF183J*
R533	VRS-CZ1JF183J*	VRS-CZ1JF103J*

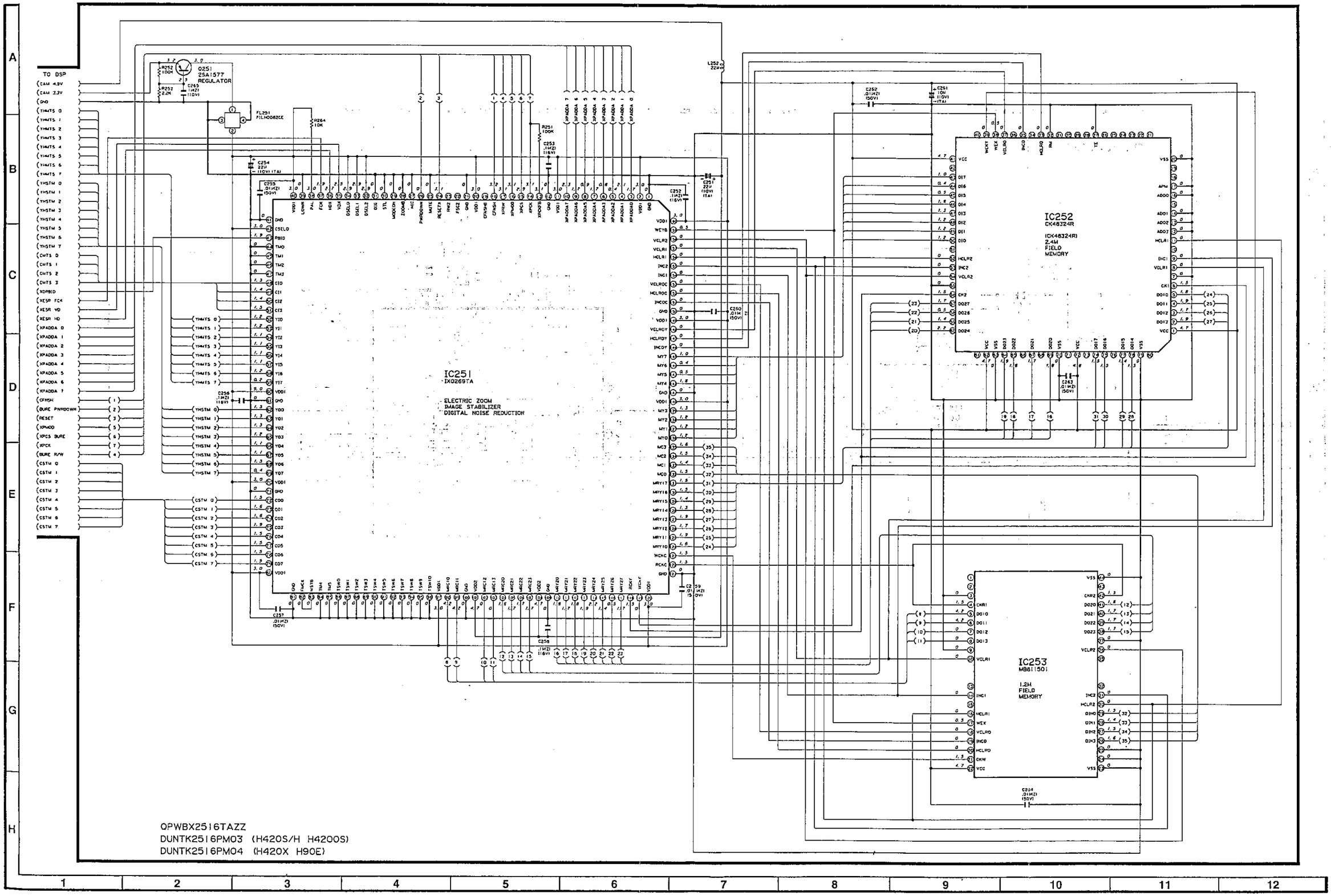
QPWBX2516TAZZ
DUNTK2516PM03 (H420S/H H4200S)
DUNTK2516PM04 (H420X H90E)

7-21. LENS DRIVE CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E




TO DSP
Q251
2SA1577
REGULATOR
FL251
FILH0082CE
IC251
IX0269TA
ELECTRIC ZOOM
IMAGE STABILIZER
DIGITAL NOISE REDUCTION
IC252
CK48324R
(CK48324R)
2.4M
FIELD
MEMORY
IC253
MB811501
1.2M
FIELD
MEMORY
QPWBX2516TAZZ
DUNTK2516PM03 (H420S/H H4200S)
DUNTK2516PM04 (H420X H90E)

DUNTK2504PM02
QPWBN2504TAZZ

REC
PLAY( )

P6601
N0563TA

MIC/SPEAKER			
1	→	INT MIC L	1
2	—	MIC GND	2
3	→	INT MIC R	3
4	—	MIC GND	4
5	→	INT MIC N	5
6	—	MIC GND	6

TL6601 TL6602 TL6603 TL6619

P6602
N0263TA

SPEAKER			
1	↔	SP (+)	1
2	↔	SP (−)	2

TL6605 TL6606

C6602 .1μ (16V)
C6603 .1μ (25V)
C6601 1000P (50V)
R6602 82K
R6603 82K
R6601 1K
C6606 .1μ (25V)
C6604 1000P (50V)

BUFFER
Q6601
UMX2

R6604 470
R6605 470

C6650 .1μ (25V)
C6651 10μ (4V) (TA)
C6652 2.2μ (10V) (TA)
C6661 2.2μ (10V) (TA)

R6619 4.7K
C6612 33μ (10V)

LPF
Q6602
2SC4617B

R6614 82K
R66 13 1K
C6608 .1μ (16V)
C6609 .1μ (25V)
R6616 8.2K
C6607 1000P (50V)
R6621 8.2K
C6614 5600P (50V)
C6613 .01μ (25V)
R6622 12K
C6610 .01μ (25V)
R6617 8.2K
C6611 4700P (50V)
R6618 12K
R6623 5.6K
R6610 5.6K
R6620 8.2K

LPF
Q6603
UMX2

MIC AMP
IC6601
BA7781K

C6631 2.2μ (10V) (TA)
C6632 2.2μ (10V) (TA)
C6630 .1μ (25V)

EXT
INT
13dB
GND
REG
BIAS
MIX
10dB
NOR
WND
15dB
DET
BIAS VCC

C6636 .022μ (25V)
R6639 18K
C6634 .047μ
R6635 8.2K
R6633 10K(F)
C6637 .022μ (25V)
C6640 2200P (50V)
R6632 3.3K(F)
R6637 8.2K
C6638 .015μ
R6638 100K
C6633 1μ (10V)
R6634 10K(F)
C66 .022 (50V)
C66 35μ
C66 .015
C66 39μ
R6676 27K
C6671 2.2μ (10V) (TA)
R6670 1M
C6672 10μ (4V) (TA)
C6674 33μ (10V) (TA)
C6676 2200P (50V)
R6671 330K
R6672 39K
R6674 100K
C6677 .022μ (25V)
L6601 330μ NM331K

C6653 1μ (10V)
R6654 10K(F)
C66 .022 (50V)
C66 .015
R6652 3.3K(F)
R6653 10K(F)
R6657 8.2K
C6658 .015μ
R6658 100K
R6659 18K
C6654 .047μ
C6657 .022μ (25V)
R6655 8.2K
C6656 .022μ (25V)
C6660 2200P (50V)

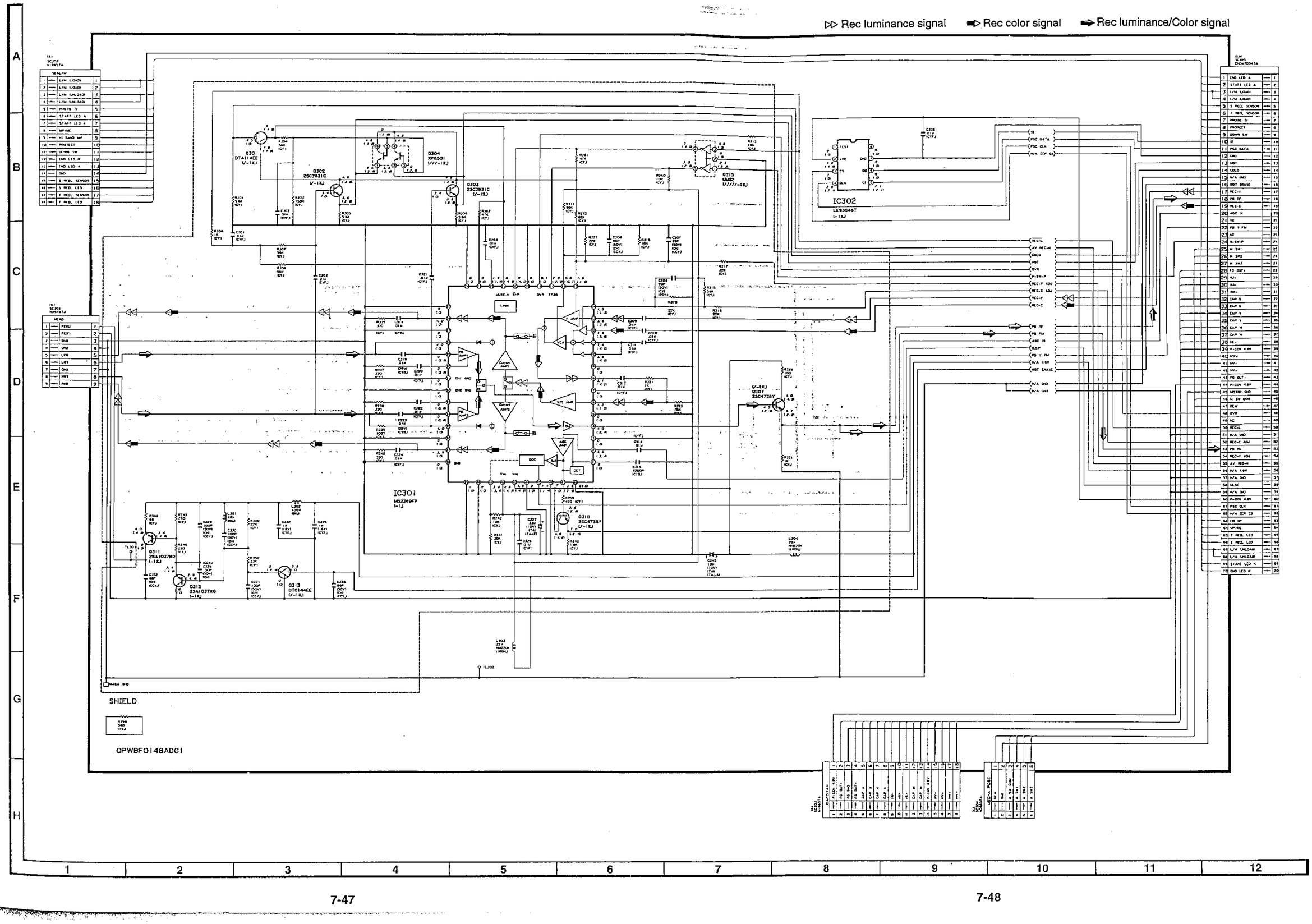
FPC1
QPWBH2510TAZZ
W6601
0S0CN1000TA65

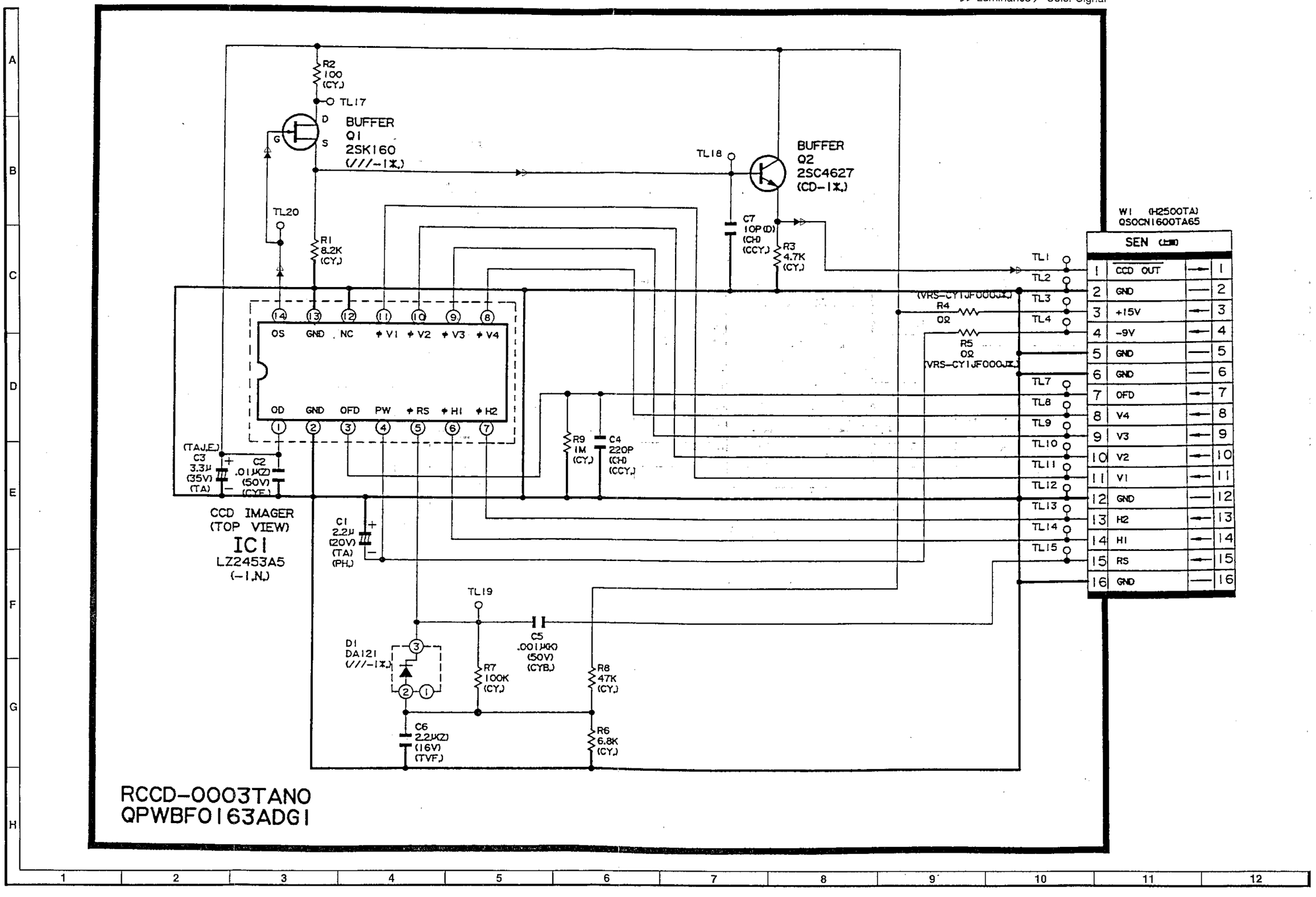
TO VTR PWB			
TL6607			
1	EXT MIC L		1
TL6608			
2	AUDIO GND		2
TL6609			
3	EXT MIC R		3
TL6610			
4	MIC 3.3V		4
TL6611			
5	MIC MONO		5
TL6612			
6	MIC L		6
TL6613			
7	AUDIO GND		7
TL6614			
8	MIC R		8
TL6615			
9	SP (+)		9
TL6616			
10	SP (−)		10

7-24. HEAD AMP CIRCUIT SCHEMATIC DIAGRAM

VL-H420S/H/X
VL-H4200S/H90E

▷▷ Rec luminance signal ➡ Rec color signal ➡ Rec luminance/Color signal




▷▶ Luminance / Color Signal
R2 100 (CY)
TL17
D
G
S
BUFFER Q1 2SK160 (///-1)
TL18
BUFFER Q2 2SC4627 (CD-1)
TL20
R1 8.2K (CY)
C7 10P (D) (CH) (CCY)
R3 4.7K (CY)
W1 (H2500TA) QSOCN1600TA65
SEN
1 CCD OUT
2 GND
3 +15V
4 -9V
5 GND
6 GND
7 OFD
8 V4
9 V3
10 V2
11 V1
12 GND
13 H2
14 H1
15 RS
16 GND
TL1
TL2
TL3
TL4
TL7
TL8
TL9
TL10
TL11
TL12
TL13
TL14
TL15
(VRS-CY1JF000JX)
R4 0Ω
R5 0Ω (VRS-CY1JF000JX)
14 13 12 11 10 9 8
OS GND NC V1 V2 V3 V4
OD GND OFD PW RS H1 H2
1 2 3 4 5 6 7
R9 1M (CY)
C4 220P (CH) (CCY)
(TAJ,E)
C3 3.3μ (35V) (TA)
C2 .01μ(Z) (50V) (CYF)
CCD IMAGER (TOP VIEW)
IC1
LZ2453A5 (-1,N)
C1 2.2μ (20V) (TA) (PH)
TL19
C5 .001μ(K) (50V) (CYB)
D1 DA121 (///-1)
3 2 1
R7 100K (CY)
R8 47K (CY)
C6 2.2μ(Z) (16V) (TVF)
R6 6.8K (CY)
RCCD-0003TANO
QPWBF0163ADG1

DUNTK2507PM03 (H420S)
DUNTK2507PM04 (H4200S)
DUNTK2507PM05 (H420H)
DUNTK2507PM06 (H420X)
DUNTK2507PM07 (H90E)
QPWBX2507TAZZ

PAL JOG
IC2401
M52358VP

INVERTER
Q2410
XP6501

LOGIC
Q2401
RN2104

BUFFER

INVERTER
02408
XP4213

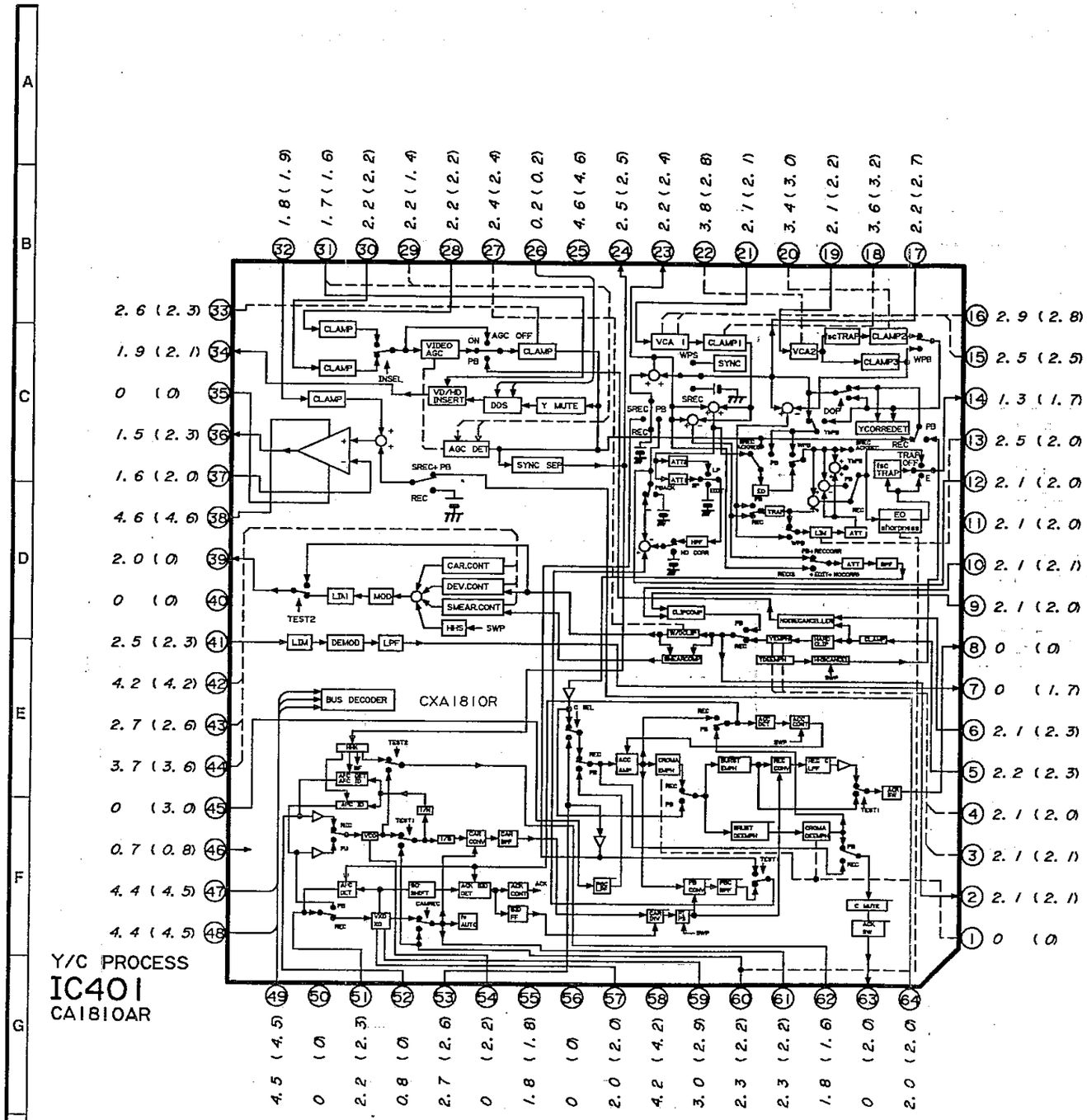
INVERTER
02407
XP4213

INVERTER
02406
RN2104
LOGIC

TO Y/C
JOG
FSC
PB C
JOG C
C-SYNC
DOP
P-CON 4.9V
JOG HD
GND
JOG VF
PB 4.0V

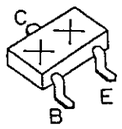
7-27. SYSTEM CONTROL CIRCUIT

VL-H420S/H/X
VL-H4200S/H90E

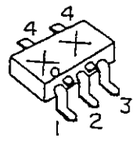


VL-H420S/H/X
VL-H4200S/H90E

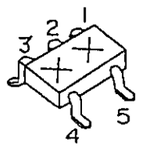
8. SEMICONDUCTOR LEAD IDENTIFICATION



2SA1037
2SA1162Y
2SA1298Y
2SA1577R
2SA1774F
2SA1832Y
2SB1295
2SB1462
2SC3931C
2SC4116Y
2SC4555
2SC4617B
2SC4627
Q2
2SC4738Y
2SD2216
2SD602A
BC847B1F
DTA114EE
DTA144EE
DTC114EE
DTC144EE
DTC144EU
DTC323
RN1102
RN1104
RN2104
UN5111
UN5113
UN9213
2SB1197K
2SA1834R
Q2701



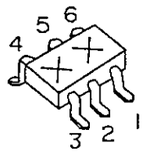
FP101
FP103



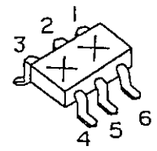
UMA2
UMA7
UMG2
UMG8
UMW1
XP1113
XP1501
XP1213
XP1601
UMC5

NJM2107F
SC14S66F
SC7S08F
SC7S32F
TA75S01F
TC7S04F
TC7S08F
TC7S32F
TC7S66U
UMY1

2SB1121T
2SB1132Q
2SB1302S
2SB1386-R
2SD874AS
2SB1424Q
2SD1628

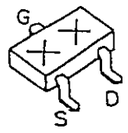


RN4604
XN4402
XN4501
XN4504
XN6401
XN4604

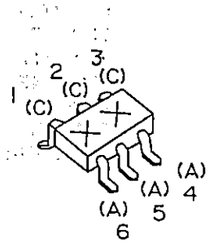


UMB2
UMD2
UMH2
UMT1
UMT2
UMX2
UMZ1

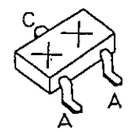
XP4111
XP4113
XP4213
XP4601
422
XP6401
XP6501
XP4311



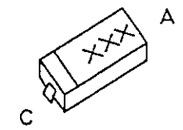
2SK160
2SK94



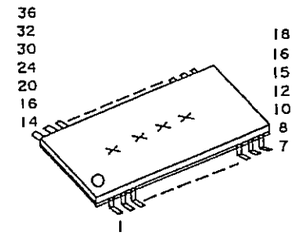
FC903
IMN10



DAN222
HVM17-5
MA132WK

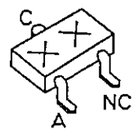


MA335Q
SFPB52
SFPB54
EX0157TA
EX0177TA
EX0182TA

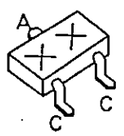


IX0239TA
CXD1267N
7AC1008B
CXL5502N
LB1843V
LB1882V
LB1888V

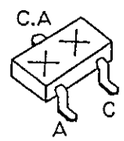
MB8346BV
MC13400V
NJM2902V
NJU4051V
NJU4053V
NJU4066V
TCHT707F



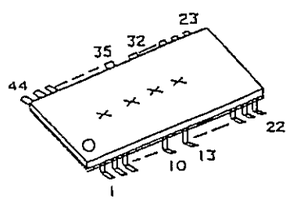
EX0148TA
EX0151TA
EX0152TA
EX0226CE
EX0626CE
EX0227CE
EX0231CE
DA121
MA132K
HRW0702A
RB451F



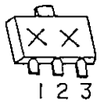
DAP222
MA132WA



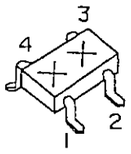
DA221
MA133
MA147
MA715



MB811501

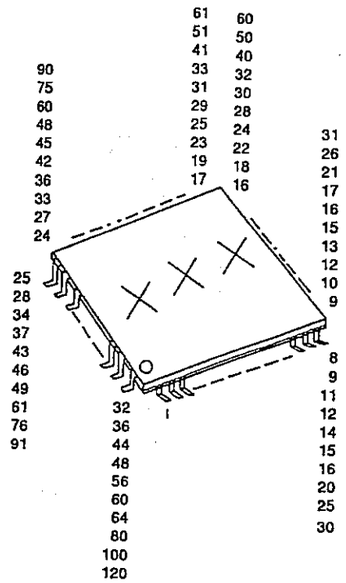


NJ79L08U
NJ79L09U
NJM79L09

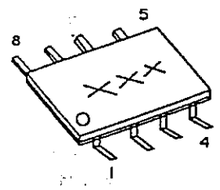


PST592EM
PST592IM

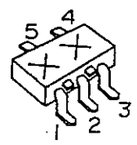
VL-H420S/H/X
VL-H4200S/H90E



IX0172TA
IX0216TA
IX0222TA
IX0223TA
IX0224TA
IX2349CE
BA7781K
CA1509AR
CK48324R
CXA1399Q
CXA1577R
CXA1810R
HA118276
IR3P90T1
LZ95D78M
MB3785V
MB88344F
XR10823
MM1262AQ



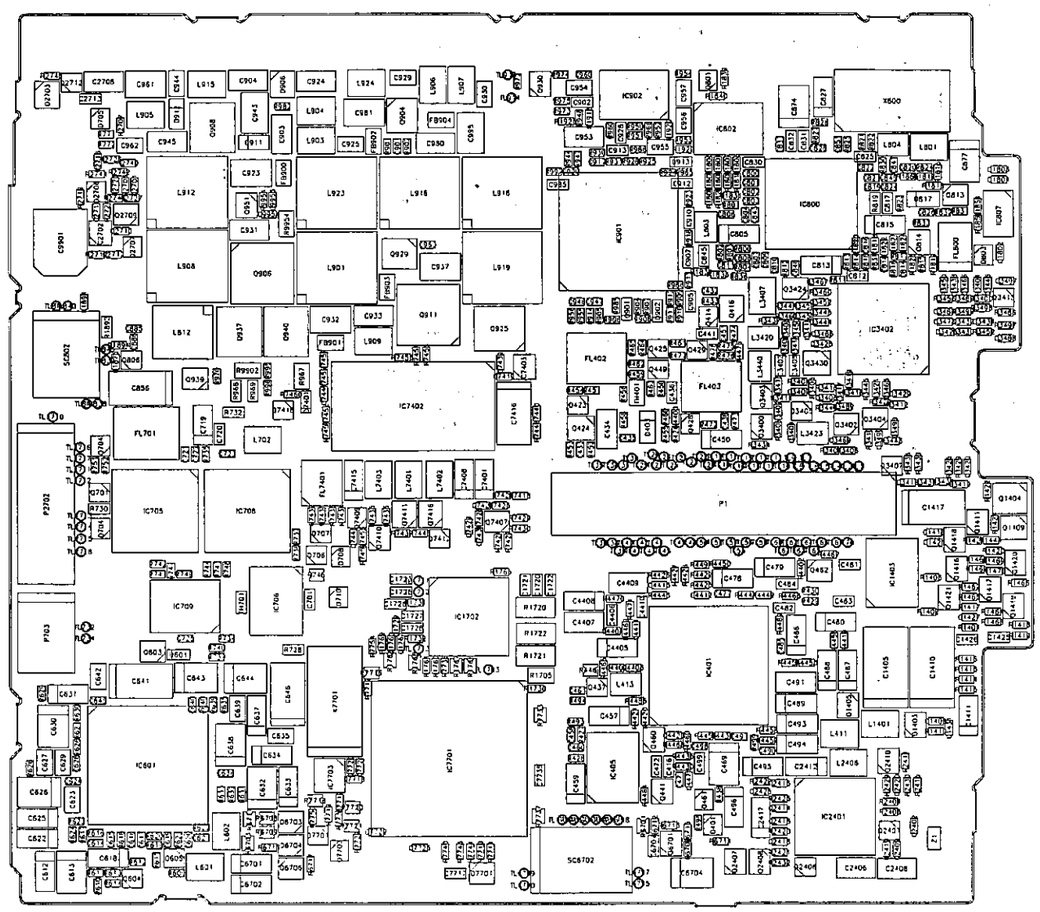
BA7655AF
M5222FP
NJM2267V
NJM2904M
NJM4560M
S8420HF
TDA7052A
XL24C04F
XL93L46F
TC7W08F
TA75W5581



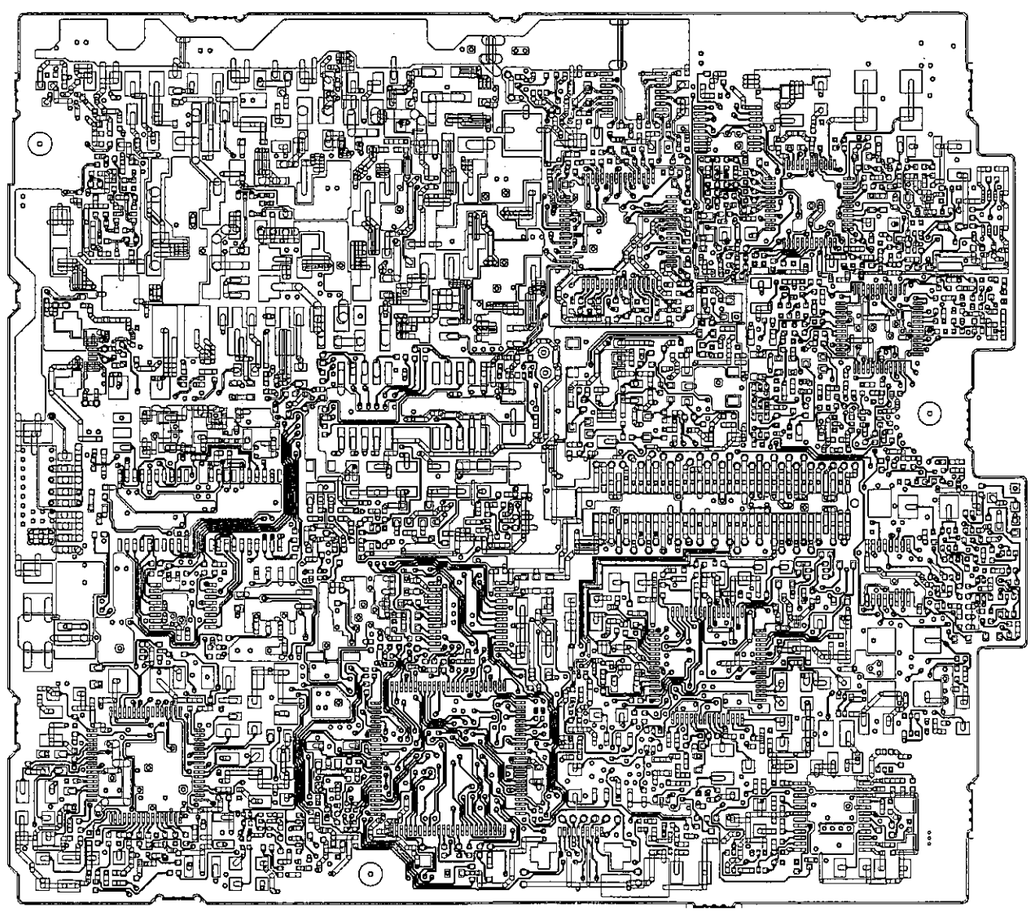
S8435CF

9-1. VCR P.W.B BOARD

VL-H420S/H/X
VL-H4200S/H90E



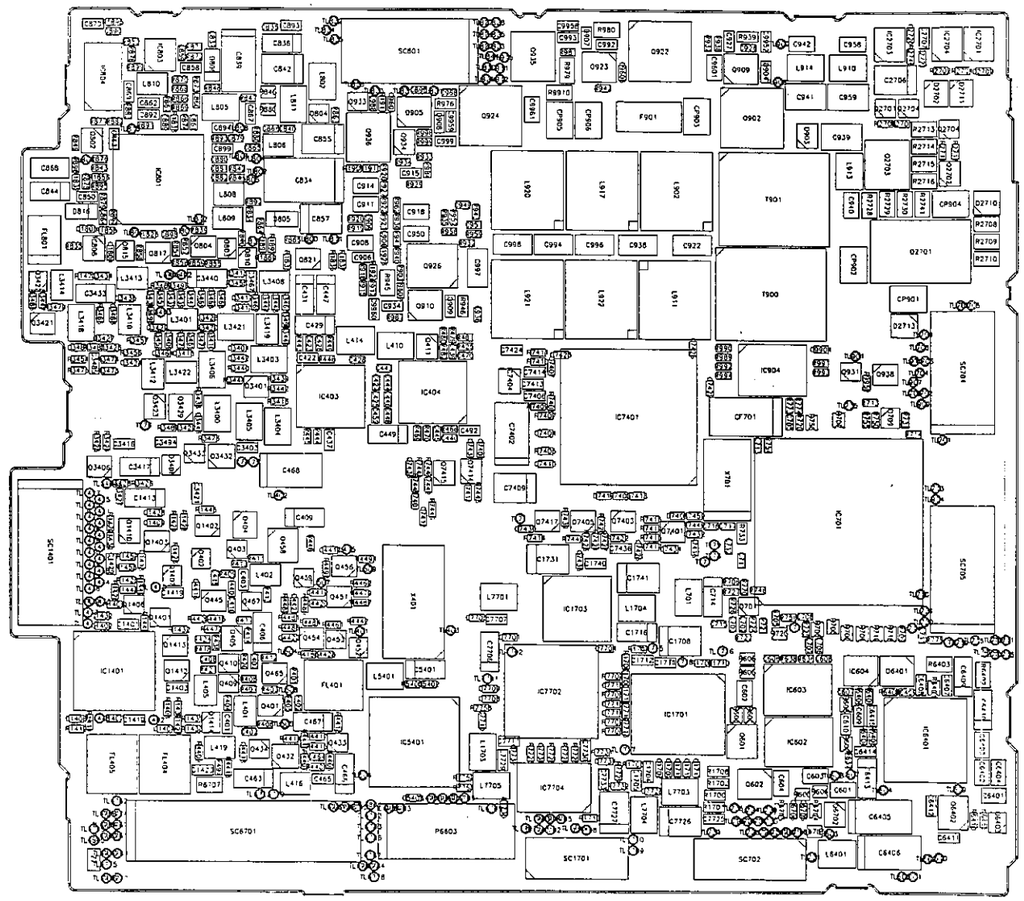
VL-H420S/H/X
VL-H4200S/H90E

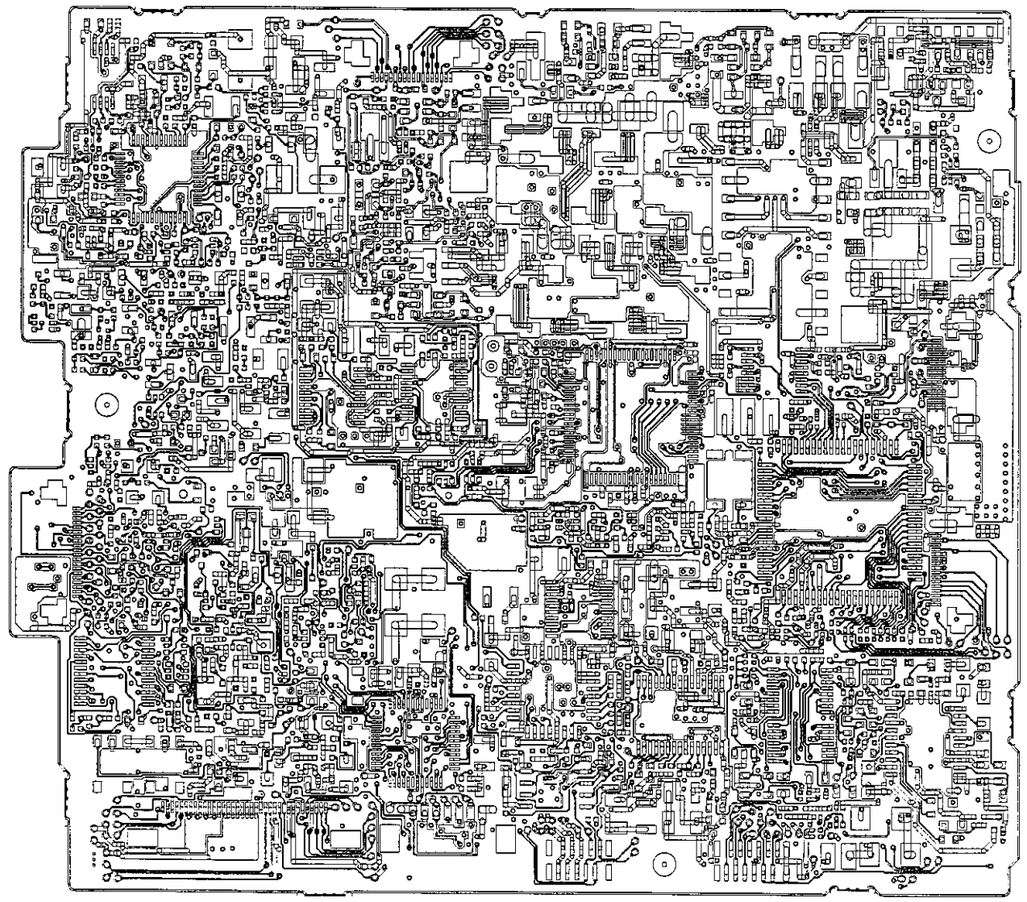


9-2. VCR P.W.B BOARD

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E





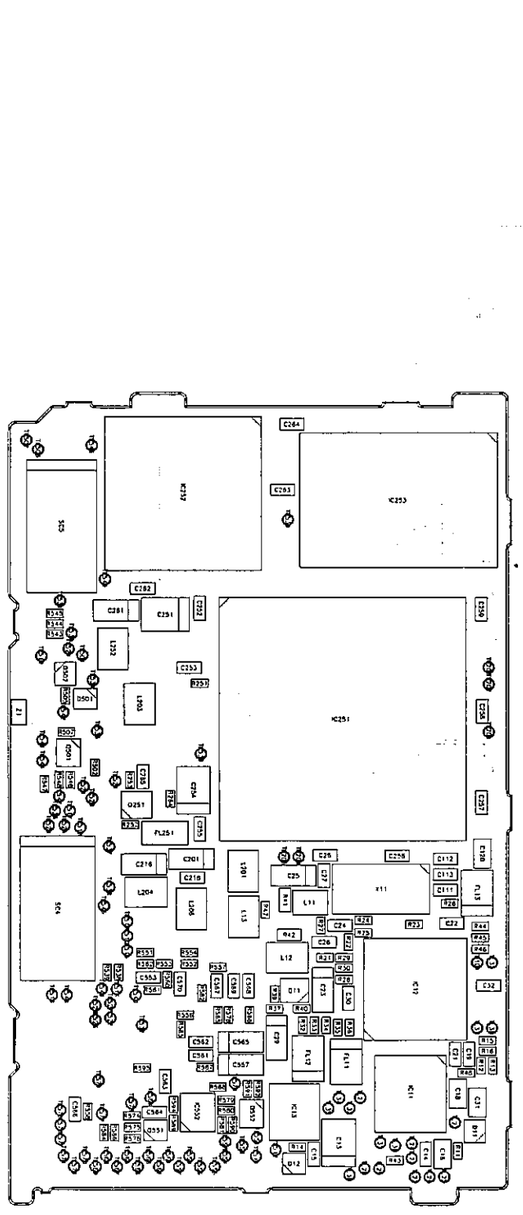
9-3

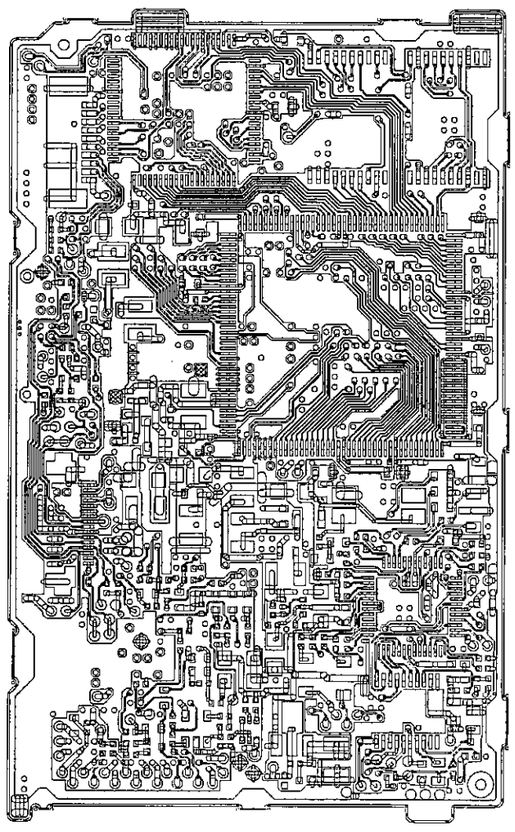
9-4

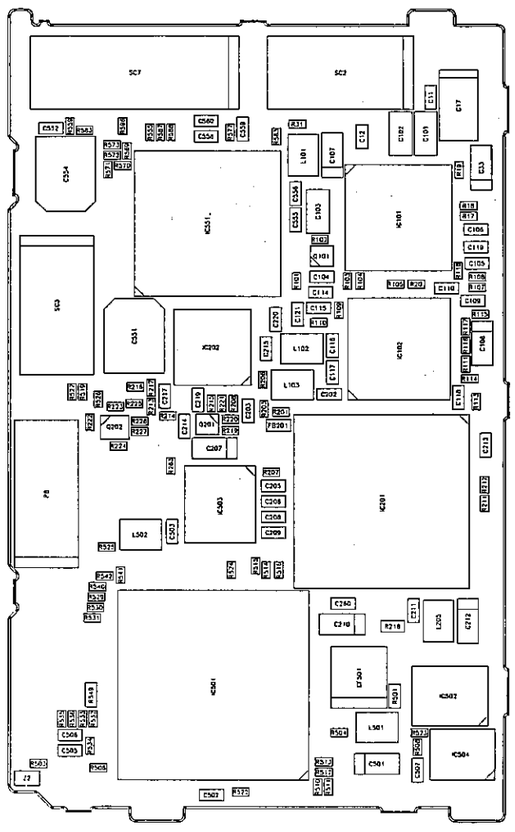
9-3. CAMERA P.W.B BOARD

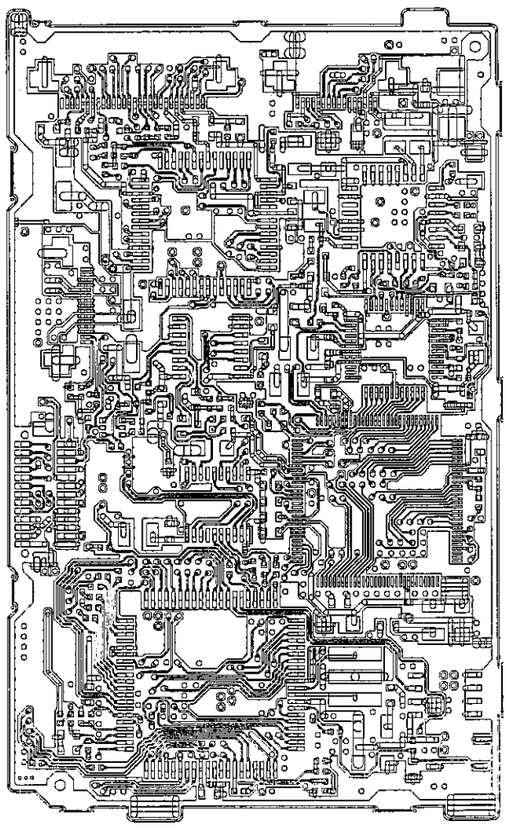
VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E

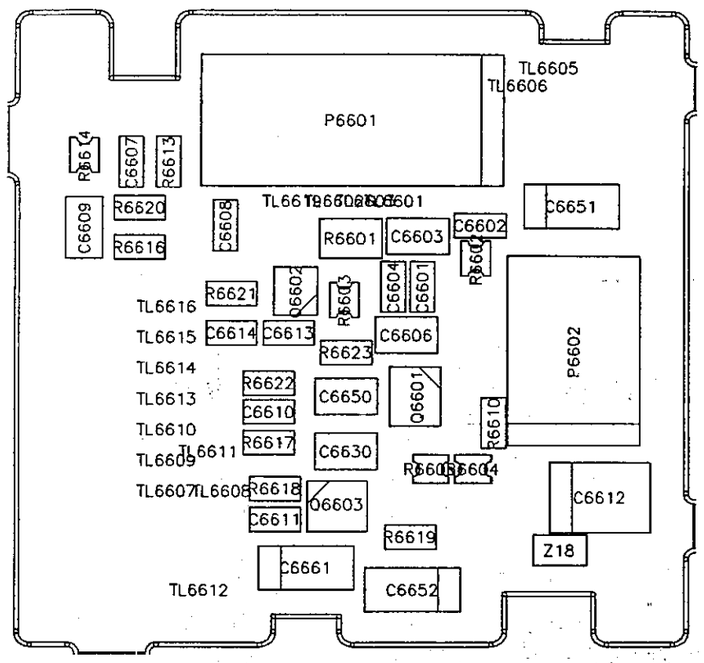




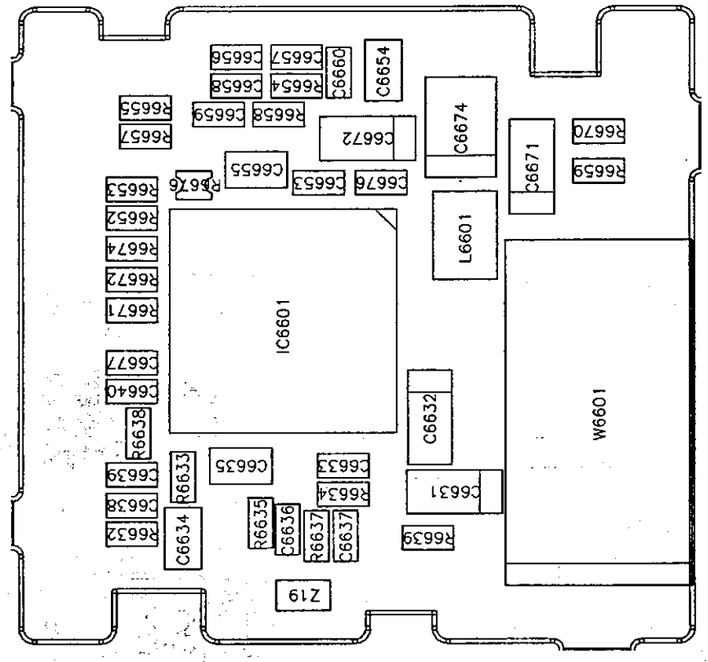


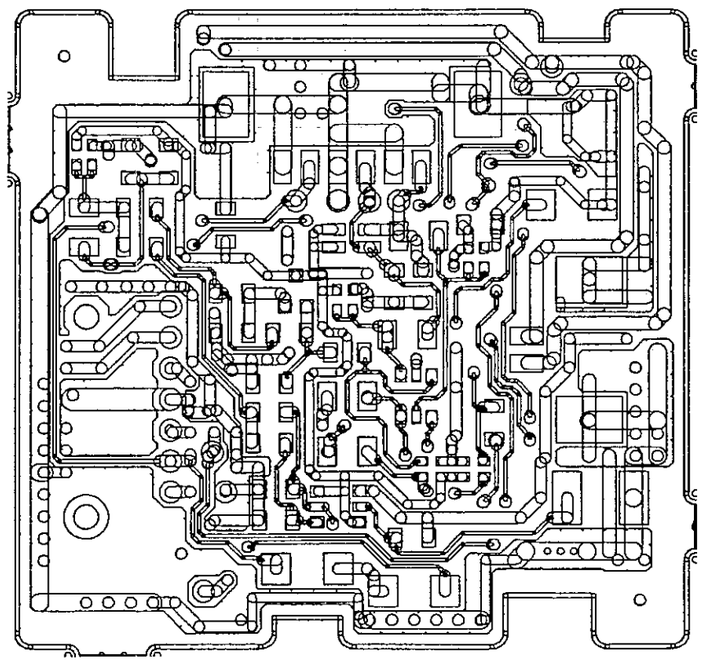


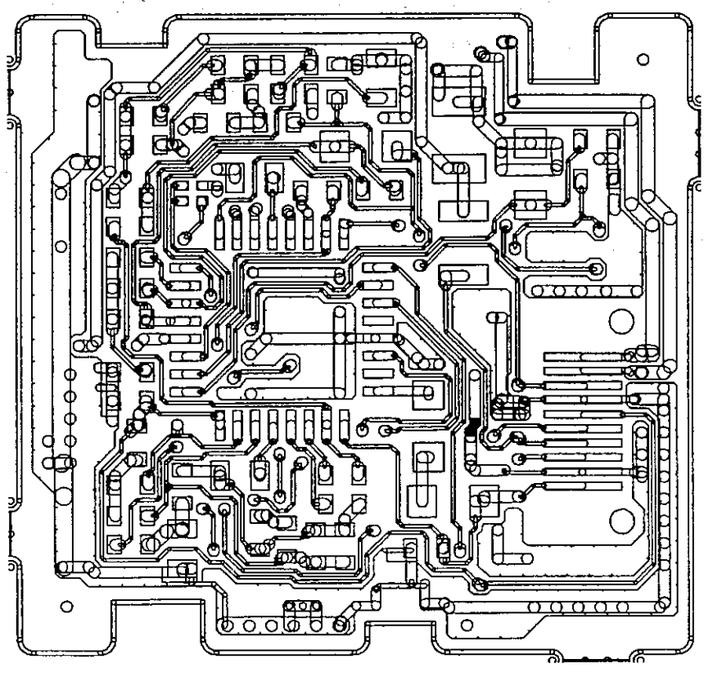
A



B





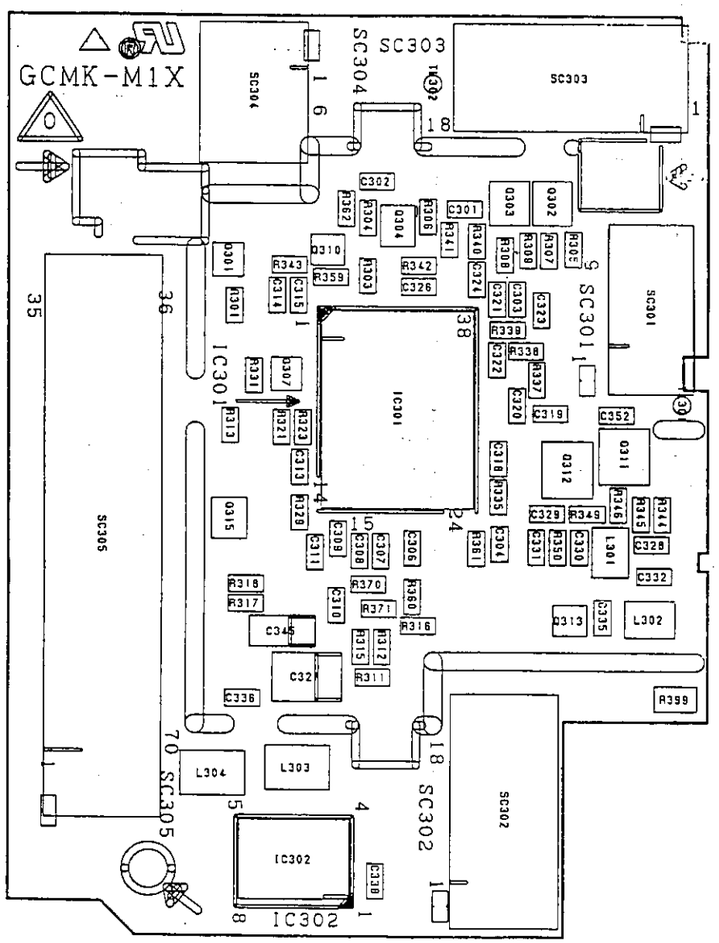


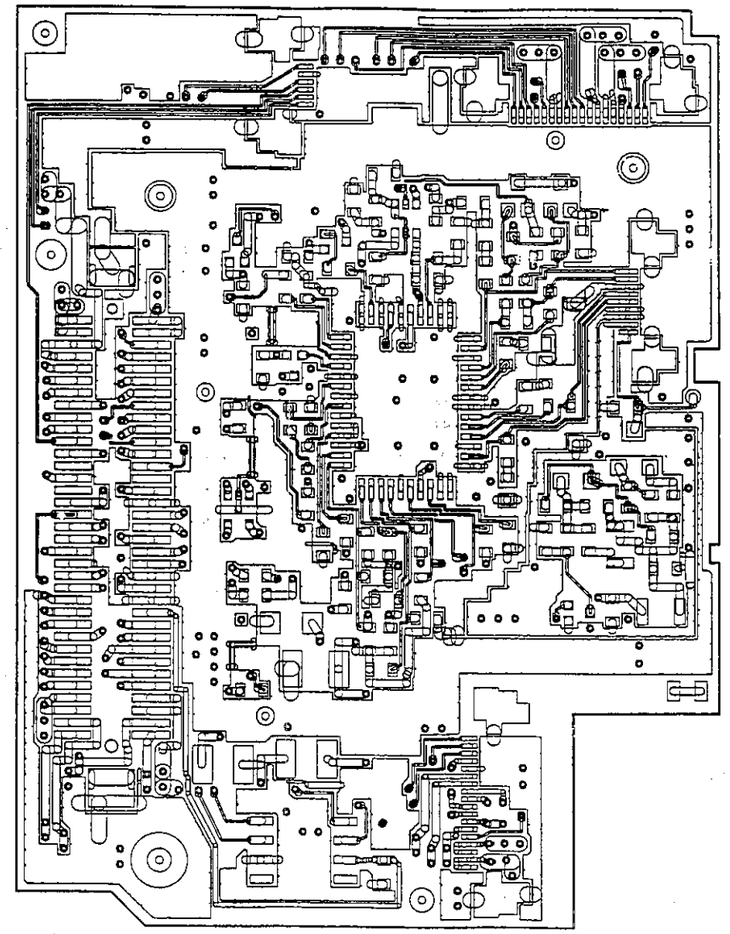
1 2 3 4 5 6 7 8 9 10 11 12

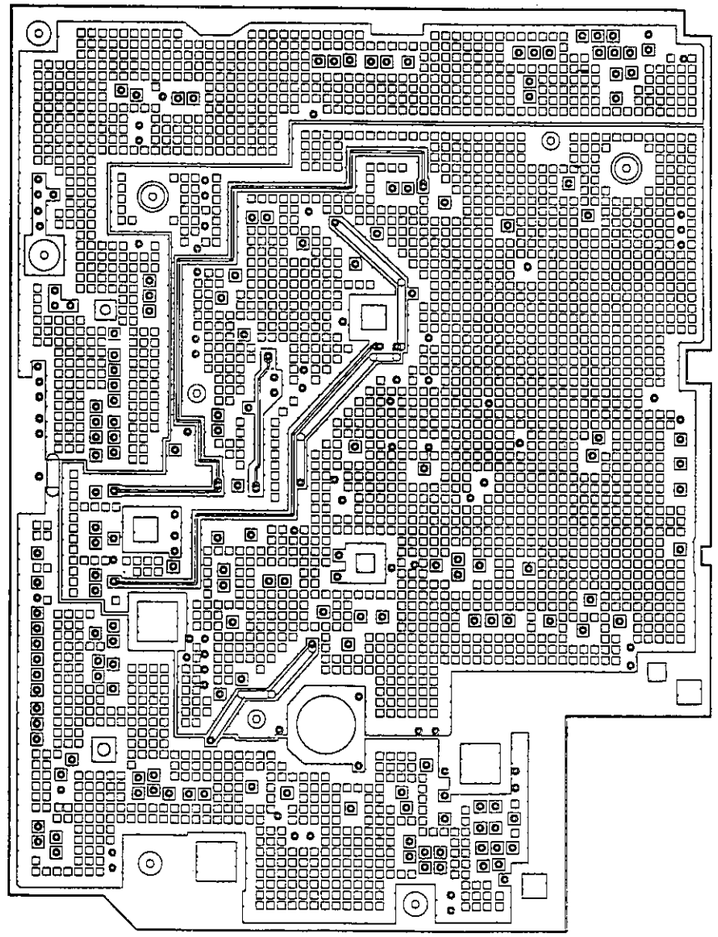
9-5. HEAD AMP P.W.B BOARD

VL-H420S/H/X
VL-H4200S/H90E

VL-H420S/H/X
VL-H4200S/H90E







10.REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION
5. PRICE CODE

⚠ MARK: SAFETY RELATED PARTS

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES

(NOT REPLACEMENT ITEM)

DUNTK2504QA02	J	MIC AMP P.W.B.	—
DUNTK2507QA03	J	VCR P.W.B. (VL-H420S)	—
DUNTK2507QA05	J	VCR P.W.B. (VL-H420H)	—
DUNTK2507QA06	J	VCR P.W.B. (VL-H420X)	—
DUNTK2507QA04	J	VCR P.W.B. (VL-H4200S)	—
DUNTK2507QA07	J	VCR P.W.B. (VL-H90E)	—
DUNTK2516QA03	J	CAMERA P.W.B. (VL-H420S/H/4200S)	—
DUNTK2516QA04	J	CAMERA P.W.B. (VL-H420X/90E)	—
RCCD-0004TAN0	J	CCD P.W.B.	—
RAMP-0005TAN1	J	HEAD AMP P.W.B.	—

DUNTK2504QA02 MIC AMP P.W.B.

INTEGRATED CIRCUITS

IC6601	VHiBA7781K/-1	J	BA7781K	AN

TRANSISTORS

Q6601	VSUMX2////-1	J	Transistor	AB
Q6603	VSUMX2////-1	J	Transistor	AB
Q6602	VS2SC4617B/-1	J	Transistor	AA

COIL AND TRANSFORMERS

L6601	VP-NM331K160N	J	Peaking 330µH 10%	AB

CAPACITORS

C6601	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C6604	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C6607	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C6602	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C6608	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA

Ref. No.	Part No.	★	Description	Code
C6603	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
C6606	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
C6609	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
C6630	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
C6650	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
C6610	VCKYCY1EB103K	J	0.01 25V Ceramic	AA
C6613	VCKYCY1EB103K	J	0.01 25V Ceramic	AA
C6611	VCKYCY1HB472K	J	4700p 50V Ceramic	AA
C6612	VCSATE1AJ336M	J	33 10V Tantalum	AG
C6674	VCSATE1AJ336M	J	33 10V Tantalum	AG
C6614	VCKYCY1HB562K	J	5600p 50V Ceramic	AA
C6631	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C6632	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C6652	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C6661	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C6671	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C6633	VCKYCY1AF105Z	J	1.0 10V Ceramic	AC
C6653	VCKYCY1AF105Z	J	1.0 10V Ceramic	AC
C6634	VCKYTV1HB473K	J	0.047 50V Ceramic	AA
C6654	VCKYTV1HB473K	J	0.047 50V Ceramic	AA
C6635	VCKYTV1HB223K	J	0.022 50V Ceramic	AB
C6655	VCKYTV1HB223K	J	0.022 50V Ceramic	AB
C6636	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C6637	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C6656	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C6657	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C6677	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C6638	VCKYCY1EB153K	J	0.015 25V Ceramic	AA
C6639	VCKYCY1EB153K	J	0.015 25V Ceramic	AA
C6658	VCKYCY1EB153K	J	0.015 25V Ceramic	AA
C6659	VCKYCY1EB153K	J	0.015 25V Ceramic	AA
C6640	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C6660	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C6676	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C6651	VCSATA0GJ106M	J	10 4.0V Tantalum	AC
C6672	VCSATA0GJ106M	J	10 4.0V Tantalum	AC

RESISTORS

R6601	VRS-CA1JF102J	J	1.0k	0.063W	5%	AA
R6602	VRK-SA1JF823J	J	82k	0.063W	5%	AB
R6603	VRK-SA1JF823J	J	82k	0.063W	5%	AB
R6614	VRK-SA1JF823J	J	82k	0.063W	5%	AB
R6604	VRK-SA1JF471J	J	470	0.063W	5%	AC
R6605	VRK-SA1JF471J	J	470	0.063W	5%	AC
R6610	VRS-CY1JF562J	J	5.6k	0.063W	5%	AA
R6623	VRS-CY1JF562J	J	5.6k	0.063W	5%	AA
R6613	VRS-CY1JF102J	J	1.0k	0.063W	5%	AA
R6616	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6617	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6620	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6621	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6635	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6637	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6655	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6657	VRS-CY1JF822J	J	8.2k	0.063W	5%	AA
R6618	VRS-CY1JF123J	J	12k	0.063W	5%	AA

Ref. No.	Part No.	★	Description	Code
R6622	VRS-CY1JF123J	J	12k 0.063W 5%	AA
R6619	VRS-CY1JF472J	J	4.7k 0.063W 5%	AA
R6632	VRS-CY1JF332F	J	3.3k 0.063W 1%	AA
R6652	VRS-CY1JF332F	J	3.3k 0.063W 1%	AA
R6633	VRS-CY1JF103F	J	10k 0.063W 1%	AA
R6634	VRS-CY1JF103F	J	10k 0.063W 1%	AA
R6653	VRS-CY1JF103F	J	10k 0.063W 1%	AA
R6654	VRS-CY1JF103F	J	10k 0.063W 1%	AA
R6638	VRS-CY1JF104J	J	100k 0.063W 5%	AA
R6658	VRS-CY1JF104J	J	100k 0.063W 5%	AA
R6674	VRS-CY1JF104J	J	100k 0.063W 5%	AA
R6639	VRS-CY1JF183J	J	18k 0.063W 5%	AA
R6659	VRS-CY1JF183J	J	18k 0.063W 5%	AA
R6670	VRS-CY1JF105J	J	1.0M 0.063W 5%	AA
R6671	VRS-CY1JF334J	J	330k 0.063W 5%	AA
R6672	VRS-CY1JF393J	J	39k 0.063W 5%	AA
R6676	VRK-SA1JF273J	J	27k 0.063W 5%	AC

MISCELLANEOUS PARTS

P6601	QPLGN0663TAZZ	J	Plug	AD
P6602	QPLGN0263TAZZ	J	Plug	AB

CABINET PARTS

FPC	QPWBH2510TAZZ	J	Printed Wiring Board	AL

DUNTK2507QA03 VCR P.W.B. (VL-H420S)
DUNTK2507QA05 VCR P.W.B. (VL-H420H)
DUNTK2507QA06 VCR P.W.B. (VL-H420X)
DUNTK2507QA04 VCR P.W.B. (VL-H4200S)
DUNTK2507QA07 VCR P.W.B. (VL-H90E)

INTEGRATED CIRCUITS

⚠ CP901	VHiCCP2E50/-1	J	I.C.	AD
⚠ CP902	VHiCCP2E50/-1	J	I.C.	AD
⚠ CP905	VHiCCP2E50/-1	J	I.C.	AD
⚠ CP906	VHiCCP2E50/-1	J	I.C.	AD
⚠ CP903	VHiCCP2E63/-1	J	I.C.	AD
IC401	VHiCA1810AR-1	J	CXA1810AR	BA
IC403	VHiCXL5517N-1	J	CXL5517N	AM
IC404	VHiCXL5517N-1	J	CXL5517N	AM
IC405	VHiCXA1211M-1	J	CXA1211M	AH
IC601	VHiAN3988NF-1	J	AN3988NFHP	AY
IC602	VHiNJU4066V-1	J	NJU4066BV	AE
IC604	VHiTA75S01F-1	J	TA75S01F	AD
IC701	RH-iX0288TAZZ	J	UPD78058GC-087	AY
IC705	RH-iX0291TAZZ	J	IX0291TA	AS
IC706	VHiXL93L46F-1	J	XLJ93LC46F	AG
IC708	RH-iX0290TAZZ	J	IX0290TA	AS
IC709	VHiTVHC157S-1	J	TC74VHC157FS	AG
IC800	VHiiR3Y29M/-1	J	IR3Y29M	AW
IC801	VHiLZ95N81M-1	J	LZ95N81M	AQ
IC802	VHiMC14053V-1	J	MC14053BDT	AF
IC1403	VHiMC14053V-1	J	MC14053BDT	AF
IC803	VHiNJM2107F-1	J	NJM2107F	AE

Ref. No.	Part No.	★	Description	Code
IC804	VHiNJM4565V-1	J	NJM4565V	AF
IC806	VHiTC7S66U/-1	J	TC7S66FU	AE
IC901	VHiBA9732KV-1	J	BA9732KV	AR
IC902	VHiMB3775FV-1	J	MB3775PFV	AH
IC904	VHiNJU4051V-1	J	NJU4051BV	AG
IC1401	VHiMC13400V-1	J	MC13400AVM	AM
IC1701	VHiLB1888V/-1	J	LB1888V-TRM	AQ
IC1702	VHiLB1882V/-1	J	LB1882V	AN
IC1703	VHiLB1843V/-1	J	LB1843V	AL
IC2401	VHiM52358VP-1	J	M52358VP	AS
IC2701	VHiS80725SN-1	J	S-80725SN-DN	AF
IC2703	VHiS81215SG-1	J	S-81215SG-QK	AF
IC2704	VHiS80721SN-1	J	S-80721SN-DJ	AF
IC3402	VHiCA1509AR-1	J	CXA1509AR	AR
IC5401	VHiMB88344F-1	J	MB88344PFV	AV
IC6401	VHiBA7785FS-1	J	BA7785FS	AN
IC7701	RH-iX0309TAZZ	J	CXP87748A-112R	AY
IC7702	VHiXR10823/-1	J	XR10823CQ	AT
IC7703	VHiSC7S04F/-1	J	SC7S04F	AC
IC7704	VHiNJM2904M-1	J	NJM2904M	AE

TRANSISTORS

Q401	VSXP4601///-1	J	Transistor	AB
Q802	VSXP4601///-1	J	Transistor	AB
Q821	VSXP4601///-1	J	Transistor	AB
Q1412	VSXP4601///-1	J	Transistor	AB
Q1413	VSXP4601///-1	J	Transistor	AB
Q1416	VSXP4601///-1	J	Transistor	AB
Q1420	VSXP4601///-1	J	Transistor	AB
Q3403	VSXP4601///-1	J	Transistor	AB
Q3404	VSXP4601///-1	J	Transistor	AB
Q402	VSRN2104///-1	J	Transistor	AA
Q409	VSRN2104///-1	J	Transistor	AA
Q459	VSRN2104///-1	J	Transistor	AA
Q2401	VSRN2104///-1	J	Transistor	AA
Q2406	VSRN2104///-1	J	Transistor	AA
Q3407	VSRN2104///-1	J	Transistor	AA
Q403	VS2SC4738Y/-1	J	Transistor	AA
Q410	VS2SC4738Y/-1	J	Transistor	AA
Q423	VS2SC4738Y/-1	J	Transistor	AA
Q425	VS2SC4738Y/-1	J	Transistor	AA
Q428	VS2SC4738Y/-1	J	Transistor	AA
Q433	VS2SC4738Y/-1	J	Transistor	AA
Q437	VS2SC4738Y/-1	J	Transistor	AA
Q449	VS2SC4738Y/-1	J	Transistor	AA
Q604	VS2SC4738Y/-1	J	Transistor	AA
Q3408	VS2SC4738Y/-1	J	Transistor	AA
Q404	VS2SC3931C/-1	J	Transistor	AB
Q424	VS2SC3931C/-1	J	Transistor	AB
Q432	VS2SC3931C/-1	J	Transistor	AB
Q3429	VS2SC3931C/-1	J	Transistor	AB
Q3430	VS2SC3931C/-1	J	Transistor	AB
Q405	VSXP6501///-1	J	Transistor	AB
Q445	VSXP6501///-1	J	Transistor	AB
Q454	VSXP6501///-1	J	Transistor	AB

Ref. No.	Part No.	★	Description	Code
Q460	VSXP6501///-1	J	Transistor	AB
Q1403	VSXP6501///-1	J	Transistor	AB
Q1410	VSXP6501///-1	J	Transistor	AB
Q2410	VSXP6501///-1	J	Transistor	AB
Q3400	VSXP6501///-1	J	Transistor	AB
Q3401	VSXP6501///-1	J	Transistor	AB
Q3406	VSXP6501///-1	J	Transistor	AB
Q3421	VSXP6501///-1	J	Transistor	AB
Q3424	VSXP6501///-1	J	Transistor	AB
Q414	VSRN1104///-1	J	Transistor	AA
Q452	VSRN1104///-1	J	Transistor	AA
Q3415	VSRN1104///-1	J	Transistor	AA
Q416	VS2SA1577//-1	J	Transistor	AC
Q3432	VS2SA1577//-1	J	Transistor	AC
Q429	VS2SA1832Y/-1	J	Transistor	AA
Q453	VS2SA1832Y/-1	J	Transistor	AA
Q461	VS2SA1832Y/-1	J	Transistor	AA
Q933	VS2SA1832Y/-1	J	Transistor	AA
Q1406	VS2SA1832Y/-1	J	Transistor	AA
Q3422	VS2SA1832Y/-1	J	Transistor	AA
Q434	VSDTC114EE/-1	J	Transistor	AB
Q441	VSUMG2/////-1	J	Transistor	AC
Q813	VSUMG2/////-1	J	Transistor	AC
Q451	VSUMW1/////-1	J	Transistor	AB
Q805	VSUMW1/////-1	J	Transistor (VL-H420H/X/90E)	AB
Q930	VSUMW1/////-1	J	Transistor	AB
Q456	VSXP4311///-1	J	Transistor	AB
Q1417	VSXP4311///-1	J	Transistor	AB
Q3402	VSXP4311///-1	J	Transistor	AB
Q458	VS2SD602A//-1	J	Transistor	AB
Q929	VS2SD602A//-1	J	Transistor	AB
Q465	VSUMA2/////-1	J	Transistor	AB
Q1402	VSUMA2/////-1	J	Transistor	AB
Q7701	VSUMA2/////-1	J	Transistor	AB
Q601	VSFMG12////-1	J	Transistor	AD
Q6401	VSFMG12////-1	J	Transistor	AD
Q603	VSUMD12N///-1	J	Transistor	AC
Q605	VSDTC144EE/-1	J	Transistor	AA
Q3433	VSDTC144EE/-1	J	Transistor	AA
Q6403	VSDTC144EE/-1	J	Transistor	AA
Q805	VSXP1501///-1	J	Transistor (VL-H420S/4200S)	AB
Q806	VS2SD2216//-1	J	Transistor	AA
Q814	VSUMD2/////-1	J	Transistor	AC
Q817	VSUMD2/////-1	J	Transistor	AC
Q934	VSUMD2/////-1	J	Transistor	AC
Q939	VSUMD2/////-1	J	Transistor	AC
Q902	VSFX803////-1	J	Transistor	AG
Q911	VSFX803////-1	J	Transistor	AG
Q922	VSFX803////-1	J	Transistor	AG
Q924	VSFX803////-1	J	Transistor	AG
Q904	VS2SB12956/-1	J	Transistor	AB
Q6402	VS2SB12956/-1	J	Transistor	AB
Q905	VSXN4604///-1	J	Transistor	AD
Q909	VSXN4604///-1	J	Transistor	AD
Q910	VSXN4604///-1	J	Transistor	AD
Q923	VSXN4604///-1	J	Transistor	AD
Q906	VSFX802////-1	J	Transistor	AG
Q908	VS2SB1121T/-1	J	Transistor	AC
Q925	VSFP101////-1	J	Transistor	AD
Q926	VSFP101////-1	J	Transistor	AD
Q931	VSDTA144EE/-1	J	Transistor	AA
Q935	VS2SB1302S/-1	J	Transistor	AD
Q937	VS2SB1302S/-1	J	Transistor	AD
Q940	VS2SB1302S/-1	J	Transistor	AD
Q936	VS2SD1620//-1	J	Transistor	AC
Q938	VSUMH2/////-1	J	Transistor	AC
Q951	VSUMY1/////-1	J	Transistor	AC
Q1404	VS2SB1197KQ-1	J	Transistor	AC
Q1411	VSXP4213///-1	J	Transistor	AB
Q2407	VSXP4213///-1	J	Transistor	AB
Q2408	VSXP4213///-1	J	Transistor	AB
Q1418	VSUMT2/////-1	J	Transistor	AB
Q6702	VSUMT2/////-1	J	Transistor	AB
Q1419	VSUMX2/////-1	J	Transistor	AB
Q1421	VSUMX2/////-1	J	Transistor	AB
Q6701	VSUMX2/////-1	J	Transistor	AB
Q2704	VS2SA1774F/-1	J	Transistor	AA
Q3405	VS2SC4627CD-1	J	Transistor	AB
Q3423	VSUMB2/////-1	J	Transistor	AB
Q6703	VSUMG4/////-1	J	Transistor	AC
Q6704	VSUMG4/////-1	J	Transistor	AC
Q6706	VSHN1B01FU/-1	J	Transistor	AC

DIODES AND LED'S

D401	VHDMA132WK/-1	J	Diode	AA
D1401	VHDMA132WK/-1	J	Diode	AA
D403	VHDHVU17TRF-1	J	Diode	AE
D806	VHDHVU17TRF-1	J	Diode	AE
D816	VHDHVU17TRF-1	J	Diode	AE
D817	VHDHVU17TRF-1	J	Diode	AE
D601	VHDMA2S111/-1	J	Diode	AC
D901	VHDMA2S111/-1	J	Diode	AC
D902	VHDMA2S111/-1	J	Diode	AC
D904	VHDMA2S111/-1	J	Diode	AC
D907	VHDMA2S111/-1	J	Diode	AC
D908	VHDMA2S111/-1	J	Diode	AC
D909	VHDMA2S111/-1	J	Diode	AC
D913	VHDMA2S111/-1	J	Diode	AC
D701	VHDDA221///-1	J	Diode	AB
D803	VHDMA132K//-1	J	Diode	AA
D804	VHDMA132K//-1	J	Diode	AA
D810	VHDMA132K//-1	J	Diode	AA
D805	RH-EX0179TAZZ	J	Zener Diode	AC
D903	VHDMA6S121/-1	J	Diode	AD
D906	VHDMA147///-1	J	Diode	AB
D911	VHDMA729///-1	J	Diode	AD
D912	VHDMA729///-1	J	Diode	AD
D1403	VHDUMR11N//-1	J	Diode	AC
D1405	VHDUMR11N//-1	J	Diode	AC

Ref. No.	Part No.	★	Description	Code
D1407	VHDMA133///-1	J	Diode	AB
D2701	VHDDAN222//-1	J	Diode	AA
D2702	RH-DX0182TAZZ	J	Diode	AD
D2703	RH-DX0182TAZZ	J	Diode	AD
D2711	RH-DX0181TAZZ	J	Diode	AC
D2713	RH-DX0181TAZZ	J	Diode	AC
	PACKAGED CIRCUITS			
TH401	VHHNTA20234-1	J	Thermistor	AC
TH701	VHHT1103K44-1	J	Thermistor	AD
X401	RCRSC0041TAZZ	J	Crystal	AK
X701	RCRSC0035TAZZ	J	Crystal	AG
X800	RCRSC0081TAZZ	J	Crystal	AK
X7701	RCRSC0033TAZZ	J	Crystal	AG
	COIL AND TRANSFORMERS			
CF701	RFILC0061TAZZ	J	Filter	AE
FL401	RCILF0308TAZZ	J	Coil	AF
FL402	RCILF0312TAZZ	J	Coil	AL
FL403	RCILF0312TAZZ	J	Coil	AL
FL404	RCILF0318TAZZ	J	Coil	AL
FL405	RCILF0319TAZZ	J	Coil	AK
FL701	RCILB0039TAZZ	J	Oscillation Coil	AE
FL800	RCILI0320TAZZ	J	IF Coil	AE
FL801	RCILI0320TAZZ	J	IF Coil	AE
L401	VPABM5R6J1R9N	J	Peaking 5.6µH 5%	AC
L402	VPABM5R6J1R9N	J	Peaking 5.6µH 5%	AC
L405	VPABM470J8R3N	J	Peaking 47µH 5%	AC
L3408	VPABM470J8R3N	J	Peaking 47µH 5%	AC
L410	VPAXM470K1R7N	J	Peaking 47µH 10%	AC
L2406	VPAXM470K1R7N	J	Peaking 47µH 10%	AC
L411	VP-WM470K1R3N	J	Peaking 47µH 10%	AB
L414	VP-WM220KR71N	J	Peaking 22µH 10%	AB
L6401	VP-WM220KR71N	J	Peaking 22µH 10%	AB
L416	VPABM3R3J1R4N	J	Peaking 3.3µH 5%	AC
L3419	VPABM3R3J1R4N	J	Peaking 3.3µH 5%	AC
L419	VPABM220J4R1N	J	Peaking 22µH 5%	AC
L3410	VPABM220J4R1N	J	Peaking 22µH 5%	AC
L601	VP-NM101K4R2N	J	Peaking 100µH 10%	AC
L602	VP-NM101K4R2N	J	Peaking 100µH 10%	AC
L3421	VP-NM101K4R2N	J	Peaking 100µH 10%	AC
L701	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L702	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L1703	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L7701	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L7703	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L7704	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L7705	VP-NM220K1R0N	J	Peaking 22µH 10%	AB
L801	VP-NM470K2R0N	J	Peaking 47µH 10%	AB
L5401	VP-NM470K2R0N	J	Peaking 47µH 10%	AB
L802	VP-NM100KR42N	J	Peaking 10µH 10%	AB
L811	VP-NM100KR42N	J	Peaking 10µH 10%	AB
L803	VPABM101J160N	J	Peaking 100µH 5%	AC
L804	VPABM680J120N	J	Peaking 68µH 5%	AC
L805	VP-1M100J1R6N	J	Peaking 10µH 5%	AC
L806	VPABM100J2R6N	J	Peaking 10µH 5%	AC
L3422	VPABM100J2R6N	J	Peaking 10µH 5%	AC
L808	VPABM120J2R9N	J	Peaking 12µH 5%	AC
L809	VPABM120J2R9N	J	Peaking 12µH 5%	AC
L810	VPABM1R2JR90N	J	Peaking 1.2µH 5%	AC
L812	RCILP0226TAZZ	J	Coil	AE
L901	RCILP0160TAZZ	J	Coil	AE
L908	RCILP0160TAZZ	J	Coil	AE
L916	RCILP0160TAZZ	J	Coil	AE
L918	RCILP0160TAZZ	J	Coil	AE
L923	RCILP0160TAZZ	J	Coil	AE
L902	RCILP0237TAZZ	J	Coil	AE
L903	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L905	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L906	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L910	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L913	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L914	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L915	VPAXM100KR42N	J	Peaking 10µH 10%	AC
L904	VP-WM2R2MR13N	J	Peaking 2.2µH 20%	AB
L907	VPAXM2R2MR16N	J	Peaking 2.2µH 20%	AC
L924	VPAXM2R2MR16N	J	Peaking 2.2µH 20%	AC
L909	VPAXM1R0MR10N	J	Peaking 1µH 20%	AC
L911	RCILP0223TAZZ	J	Coil	AE
L917	RCILP0223TAZZ	J	Coil	AE
L912	RCILP0161TAZZ	J	Coil	AE
L919	RCILP0161TAZZ	J	Coil	AE
L920	RCILP0206TAZZ	J	Coil	AE
L921	RCILP0159TAZZ	J	Coil	AF
L922	RCILP0205TAZZ	J	Coil	AE
L1401	VPAXM151K6R1N	J	Peaking 150µH 10%	AC
L1704	VP-NM1R0MR10N	J	Peaking 1µH 20%	AB
L3400	VPAEM101J7R7N	J	Peaking 100µH 5%	AC
L3401	VPABM270J4R7N	J	Peaking 27µH 5%	AC
L3414	VPABM270J4R7N	J	Peaking 27µH 5%	AC
L3403	VPAEM121J9R0N	J	Peaking 120µH 5%	AC
L3404	VPAEM331J210N	J	Peaking 330µH 5%	AC
L3405	VPAEM471J250N	J	Peaking 470µH 5%	AC
L3407	VPAEM471J250N	J	Peaking 470µH 5%	AC
L3406	VPAEM181J130N	J	Peaking 180µH 5%	AC
L3412	VPABM6R8J2R0N	J	Peaking 6.8µH 5%	AC
L3413	VPABM180J3R6N	J	Peaking 18µH 5%	AC
L3420	VPABM180J3R6N	J	Peaking 18µH 5%	AC
L3423	VPABM150J3R3N	J	Peaking 15µH 5%	AC
L3440	VPABM330J5R3N	J	Peaking 33µH 5%	AC
T900	RTRNZ0096TAZZ	J	Transformer	AK
⚠ T901	RTRNZ0090TAZZ	J	Transformer	AK
	CAPACITORS			
C401	VCCCCY1HH331J	J	330p 50V Ceramic	AA
C472	VCCCCY1HH331J	J	330p 50V Ceramic	AA
C402	VCCCCZ1HH121J	J	120p 50V Ceramic	AB
C2414	VCCCCZ1HH121J	J	120p 50V Ceramic	AB
C3447	VCCCCZ1HH121J	J	120p 50V Ceramic	AB
C403	VCCCCY1HH391J	J	390p 50V Ceramic	AA

Ref. No.	Part No.	★		Description		Code
C416	VCCCCY1HH391J	J	390p	50V	Ceramic	AA
C406	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C431	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C447	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C450	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C457	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C463	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C467	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C478	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C480	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C486	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C487	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C493	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C494	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C495	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C496	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C714	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C836	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C1413	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C2412	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C3417	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C3433	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C3440	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C4405	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C5401	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C6413	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C6701	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C6702	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C7706	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C407	VCCCCZ1HH470J	J	47p	50V	Ceramic	AB
C408	VCCCCZ1HH470J	J	47p	50V	Ceramic	AB
C433	VCCCCZ1HH470J	J	47p	50V	Ceramic	AB
C1432	VCCCCZ1HH470J	J	47p	50V	Ceramic	AB
C3411	VCCCCZ1HH470J	J	47p	50V	Ceramic	AB
C409	VCSAPD1CJ105M	J	1.0	16V	Tantalum	AC
C805	VCSAPD1CJ105M	J	1.0	16V	Tantalum	AC
C844	VCSAPD1CJ105M	J	1.0	16V	Tantalum	AC
C410	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C425	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C426	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C427	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C428	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C444	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C445	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C446	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C448	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C708	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C711	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C712	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C715	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C721	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C722	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C723	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C725	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C835	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C837	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB

Ref. No.	Part No.	★		Description		Code
C840	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C859	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C885	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C890	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C895	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C909	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C960	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C963	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1407	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1416	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1421	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1427	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1710	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1729	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C1804	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C2413	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C2720	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C3426	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C3486	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C5402	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C5403	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C6705	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C6706	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7704	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7709	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7714	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7715	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7728	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C7734	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C9904	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C415	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C423	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C432	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C438	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C440	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C443	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C452	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C458	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C460	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C461	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C477	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C485	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C490	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C497	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C606	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C615	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C616	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C617	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C620	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C645	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C800	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C801	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C802	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C803	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C804	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C811	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB

Ref. No.	Part No.	★		Description	Code
C814	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C816	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C818	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C824	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C833	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C843	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C988	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1402	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1404	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1406	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1408	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1409	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C1428	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C2402	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C2420	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C2701	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C2721	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3407	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3412	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3415	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3418	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3420	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3424	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3425	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3429	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3430	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3435	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3438	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3444	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3445	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3446	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3452	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3464	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3465	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3483	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3488	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3496	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C3497	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4404	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4412	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4413	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4415	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4416	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4417	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4421	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4422	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C4425	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C7701	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C7710	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C7722	VCKYCZ1HF103Z	J	0.01	50V Ceramic	AB
C422	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C437	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C441	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C492	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C609	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C610	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC

Ref. No.	Part No.	★		Description	Code
C701	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C720	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C830	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C831	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C832	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C845	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C892	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C907	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C910	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C928	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C985	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1403	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1419	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1426	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1429	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1712	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1723	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1725	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C1740	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C2707	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C3416	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C3494	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C6411	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C6412	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C6414	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C6415	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C7707	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C7717	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C7725	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C7729	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C7735	VCKYCY1AF105Z	J	1.0	10V Ceramic	AC
C429	VCSAPD0JJ335M	J	3.3	6.3V Tantalum	AC
C449	VCSAPD0JJ335M	J	3.3	6.3V Tantalum	AC
C612	VCSAPD0JJ335M	J	3.3	6.3V Tantalum	AC
C633	VCSAPD0JJ335M	J	3.3	6.3V Tantalum	AC
C434	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C491	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C2406	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C2408	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C4407	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C4409	VCKYTQ1CB105K	J	1.0	16V Ceramic	AC
C435	VCCCCZ1HH820J	J	82p	50V Ceramic	AB
C498	VCCCCZ1HH820J	J	82p	50V Ceramic	AB
C861	VCCCCZ1HH820J	J	82p	50V Ceramic	AB
C3443	VCCCCZ1HH820J	J	82p	50V Ceramic	AB
C4418	VCCCCZ1HH820J	J	82p	50V Ceramic	AB
C436	VCCCCY1HH471J	J	470p	50V Ceramic	AA
C3421	VCCCCY1HH471J	J	470p	50V Ceramic	AA
C9958	VCCCCY1HH471J	J	470p	50V Ceramic	AA
C451	VCCCCZ1HH330J	J	33p	50V Ceramic	AB
C3419	VCCCCZ1HH330J	J	33p	50V Ceramic	AB
C3431	VCCCCZ1HH330J	J	33p	50V Ceramic	AB
C459	VCSAPD1AJ225M	J	2.2	10V Tantalum	AC
C618	VCSAPD1AJ225M	J	2.2	10V Tantalum	AC
C622	VCSAPD1AJ225M	J	2.2	10V Tantalum	AC
C625	VCSAPD1AJ225M	J	2.2	10V Tantalum	AC

Ref. No.	Part No.	★	Description	Code
C634	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C637	VCSAPD1AJ225M	J	2.2 10V Tantalum	AC
C464	VCCCCZ1HH560J	J	56p 50V Ceramic	AB
C846	VCCCCZ1HH560J	J	56p 50V Ceramic	AB
C864	VCCCCZ1HH560J	J	56p 50V Ceramic	AB
C865	VCCCCZ1HH560J	J	56p 50V Ceramic	AB
C1431	VCCCCZ1HH560J	J	56p 50V Ceramic	AB
C465	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C927	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C934	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C993	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C999	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C3402	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C3405	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C3485	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C9952	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C9959	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C9960	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C466	VCSATA1AJ475M	J	4.7 10V Tantalum	AC
C479	VCSATA1AJ475M	J	4.7 10V Tantalum	AC
C719	VCSATA1AJ475M	J	4.7 10V Tantalum	AC
C1411	VCSATA1AJ475M	J	4.7 10V Tantalum	AC
C2417	VCSATA1AJ475M	J	4.7 10V Tantalum	AC
C468	VCSATC1AJ476M	J	47 10V Tantalum	AE
C641	VCSATC1AJ476M	J	47 10V Tantalum	AE
C646	VCSATC1AJ476M	J	47 10V Tantalum	AE
C839	VCSATC1AJ476M	J	47 10V Tantalum	AE
C6405	VCSATC1AJ476M	J	47 10V Tantalum	AE
C6406	VCSATC1AJ476M	J	47 10V Tantalum	AE
C469	VCSATE1AJ226M	J	22 10V Tantalum	AD
C471	VCCCCZ1HH151J	J	150p 50V Ceramic	AB
C2425	VCCCCZ1HH151J	J	150p 50V Ceramic	AB
C4471	VCCCCZ1HH151J	J	150p 50V Ceramic	AB
C481	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C483	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C484	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C499	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C825	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C862	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C863	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C1401	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C1412	VCKYCY1CF474Z	J	0.47 16V Ceramic	AB
C482	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA
C812	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA
C1720	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA
C1721	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA
C1722	VCKYCY1CF224Z	J	0.22 16V Ceramic	AA
C488	VCSATA1AJ335M	J	3.3 10V Tantalum	AC
C489	VCSATA1AJ335M	J	3.3 10V Tantalum	AC
C813	VCSATA1AJ335M	J	3.3 10V Tantalum	AC
C601	VCKYTV1CF225Z	J	2.2 16V Ceramic	AC
C602	VCKYTV1CF225Z	J	2.2 16V Ceramic	AC
C607	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C608	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C702	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C703	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB

Ref. No.	Part No.	★	Description	Code
C705	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C706	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C707	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C860	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C889	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C917	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C920	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C946	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C947	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C949	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C951	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C1430	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C1760	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C1761	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C2416	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C2418	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C2709	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C4411	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C4420	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C7719	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C7723	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C7732	VCKYCZ1HB102K	J	1000p 50V Ceramic	AB
C613	VCSATE0JJ226M	J	22 6.3V Tantalum	AD
C632	VCSATE0JJ226M	J	22 6.3V Tantalum	AD
C614	VCKYCZ1HB122K	J	1200p 50V Ceramic	AB
C619	VCKYCZ1HB122K	J	1200p 50V Ceramic	AB
C9954	VCKYCZ1HB122K	J	1200p 50V Ceramic	AB
C621	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C866	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C3413	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C3414	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C3473	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C3484	VCCCCZ1HH220J	J	22p 50V Ceramic	AB
C623	VCKYTV1CB474K	J	0.47 16V Ceramic	AC
C627	VCKYTV1CB474K	J	0.47 16V Ceramic	AC
C635	VCKYTV1CB474K	J	0.47 16V Ceramic	AC
C639	VCKYTV1CB474K	J	0.47 16V Ceramic	AC
C624	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C636	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C713	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C807	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C809	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C810	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C819	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C821	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C822	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C828	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C886	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C926	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C936	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C968	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C1702	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C1703	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C3401	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C3469	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB
C9953	VCKYCZ1CB103K	J	0.01 16V Ceramic	AB

Ref. No.	Part No.	★			Description	Code
C626	VCSATE0JJ476M	J	47	6.3V	Tantalum	AF
C638	VCSATE0JJ476M	J	47	6.3V	Tantalum	AF
C628	VCKYCZ1EB472K	J	4700p	25V	Ceramic	AB
C640	VCKYCZ1EB472K	J	4700p	25V	Ceramic	AB
C629	VCKYTV1CB224K	J	0.22	16V	Ceramic	AB
C642	VCKYTV1CB224K	J	0.22	16V	Ceramic	AB
C908	VCKYTV1CB224K	J	0.22	16V	Ceramic	AB
C9601	VCKYTV1CB224K	J	0.22	16V	Ceramic	AB
C630	VCSATE0JJ336M	J	33	6.3V	Tantalum	AD
C643	VCSATE0JJ336M	J	33	6.3V	Tantalum	AD
C644	VCSATE0JJ336M	J	33	6.3V	Tantalum	AD
C631	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C6409	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C6410	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C717	VCCCCZ1HH160J	J	16p	50V	Ceramic	AA
C718	VCCCCZ1HH180J	J	18p	50V	Ceramic	AB
C3409	VCCCCZ1HH180J	J	18p	50V	Ceramic	AB
C3410	VCCCCZ1HH180J	J	18p	50V	Ceramic	AB
C3437	VCCCCZ1HH180J	J	18p	50V	Ceramic	AB
C806	VCKYCZ1HB391K	J	390p	50V	Ceramic	AB
C815	VCSATA0GJ106M	J	10	4.0V	Tantalum	AC
C817	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C820	VCCCCZ1HH390J	J	39p	50V	Ceramic	AB
C827	VCSAPD1DJ474M	J	0.47	20V	Tantalum	AD
C834	VCSATD1VJ106M	J	10	35V	Tantalum	AF
C842	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C874	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C1708	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C1731	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C1741	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C2706	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C7726	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C7727	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C848	VCCCCZ1HH221J	J	220p	50V	Ceramic	AB
C850	VCCCCY1EH821J	J	820p	25V	Ceramic	AB
C851	VCCCCZ1HH8R0D	J	8.0p	50V	Ceramic	AB
C3480	VCCCCZ1HH8R0D	J	8.0p	50V	Ceramic	AB
C855	VCSATE1VJ335M	J	3.3	35V	Tantalum	AD
C856	VCSATC1DJ226M	J	22	20V	Tantalum	AF
C857	VCSATE1DJ475M	J	4.7	20V	Tantalum	AD
C858	VCKYCY1HB561K	J	560p	50V	Ceramic	AA
C867	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C868	RC-CZ0019TAZZ	J	Capacitor			AF
C903	RC-CZ0019TAZZ	J	Capacitor			AF
C904	RC-CZ0019TAZZ	J	Capacitor			AF
C924	RC-CZ0019TAZZ	J	Capacitor			AF
C933	RC-CZ0019TAZZ	J	Capacitor			AF
C953	RC-CZ0019TAZZ	J	Capacitor			AF
C996	RC-CZ0019TAZZ	J	Capacitor			AF
C998	RC-CZ0019TAZZ	J	Capacitor			AF
C869	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C870	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C893	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C2713	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C6707	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C877	VCSATE1AJ336M	J	33	10V	Tantalum	AG

Ref. No.	Part No.	★			Description	Code
C6704	VCSATE1AJ336M	J	33	10V	Tantalum	AG
C879	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C900	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C1700	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C1714	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C3489	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C7718	VCCCCZ1HH101J	J	100p	50V	Ceramic	AB
C880	VCCCCZ1HH181J	J	180p	50V	Ceramic	AB
C881	VCCCCZ1HH181J	J	180p	50V	Ceramic	AB
C882	VCCCCZ1HH181J	J	180p	50V	Ceramic	AB
C899	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C905	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C1711	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C6407	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C6408	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C906	VCKYCY1HB562K	J	5600p	50V	Ceramic	AA
C911	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C914	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C918	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C950	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C954	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C955	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C956	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C957	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C912	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C913	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C915	VCKYCY1HB222K	J	2200p	50V	Ceramic	AA
C922	RC-KZ0025TAZZ	J	Capacitor			AD
C931	RC-KZ0025TAZZ	J	Capacitor			AD
C938	RC-KZ0025TAZZ	J	Capacitor			AD
C945	RC-KZ0025TAZZ	J	Capacitor			AD
C980	RC-KZ0025TAZZ	J	Capacitor			AD
C994	RC-KZ0025TAZZ	J	Capacitor			AD
C997	RC-KZ0025TAZZ	J	Capacitor			AD
C923	RC-KZ0026TAZZ	J	Capacitor			AF
C932	RC-KZ0026TAZZ	J	Capacitor			AF
C937	RC-KZ0026TAZZ	J	Capacitor			AF
C981	RC-KZ0026TAZZ	J	Capacitor			AF
C995	RC-KZ0026TAZZ	J	Capacitor			AF
C925	VCKYTV1CF105Z	J	1.0	16V	Ceramic	AB
C929	VCKYTV1CF105Z	J	1.0	16V	Ceramic	AB
C930	VCKYTV1CF105Z	J	1.0	16V	Ceramic	AB
C942	VCKYTV1CF105Z	J	1.0	16V	Ceramic	AB
C939	RC-CZ0012TAZZ	J	Capacitor			AE
C941	RC-CZ0012TAZZ	J	Capacitor			AE
C943	RC-CZ0012TAZZ	J	Capacitor			AE
C940	VCKYTV1EF104Z	J	0.1	25V	Ceramic	AB
C944	VCKYTV1EF104Z	J	0.1	25V	Ceramic	AB
C958	VCKYTV1EF104Z	J	0.1	25V	Ceramic	AB
C962	VCKYTV1EF104Z	J	0.1	25V	Ceramic	AB
C959	RC-CZ0017TAZZ	J	Capacitor			AE
C961	RC-CZ0017TAZZ	J	Capacitor			AE
C992	VCKYCY1EB223K	J	0.022	25V	Ceramic	AA
C4406	VCKYCY1EB223K	J	0.022	25V	Ceramic	AA
C1405	VCSATD1AJ107M	J	100	10V	Tantalum	AF
C1410	VCSATD1AJ107M	J	100	10V	Tantalum	AF

Ref. No.	Part No.	★		Description	Code
C1417	VCSATC1CJ336M	J	33	16V Tantalum	AE
C1704	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C1705	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C1726	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C1727	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C1728	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C7711	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C7730	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C7733	VCKYCY1CB104K	J	0.1	16V Ceramic	AB
C1716	VCSATA1EJ105M	J	1.0	25V Tantalum	AC
C1717	VCKYCZ1CB822K	J	8200p	16V Ceramic	AB
C1718	VCKYCZ1CB822K	J	8200p	16V Ceramic	AB
C1719	VCKYCZ1CB822K	J	8200p	16V Ceramic	AB
C1805	VCKYCZ1EB682K	J	6800p	25V Ceramic	AB
C7731	VCKYCZ1EB682K	J	6800p	25V Ceramic	AB
C2409	VCKYCZ1HB152K	J	1500p	50V Ceramic	AB
C7705	VCKYCZ1HB152K	J	1500p	50V Ceramic	AB
C2708	VCKYTQ1CB334K	J	0.33	16V Ceramic	AB
C3403	VCCCCY1HH360J	J	36p	50V Ceramic	AA
C3404	VCKYCZ1HB222K	J	2200p	50V Ceramic	AB
C7716	VCKYCZ1HB222K	J	2200p	50V Ceramic	AB
C3406	VCCCCZ1HH100D	J	10p	50V Ceramic	AB
C3490	VCCCCZ1HH100D	J	10p	50V Ceramic	AB
C3492	VCCCCZ1HH100D	J	10p	50V Ceramic	AB
C3422	VCCCCZ1HH270J	J	27p	50V Ceramic	AB
C3481	VCCCCZ1HH270J	J	27p	50V Ceramic	AB
C7708	VCCCCZ1HH270J	J	27p	50V Ceramic	AB
C3423	VCCCCZ1HH7R0D	J	7.0p	50V Ceramic	AB
C3436	VCCCCZ1HH7R0D	J	7.0p	50V Ceramic	AB
C3427	VCKYCZ1EF223Z	J	0.022	25V Ceramic	AB
C3434	VCKYCZ1EF223Z	J	0.022	25V Ceramic	AB
C3475	VCKYCZ1EF223Z	J	0.022	25V Ceramic	AB
C3432	VCCCCZ1HH150J	J	15p	50V Ceramic	AB
C3466	VCCCCZ1HH150J	J	15p	50V Ceramic	AB
C3439	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C3441	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C3468	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C9602	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C9603	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C9604	VCKYCZ1CF473Z	J	0.047	16V Ceramic	AB
C3448	VCCCCZ1HH680J	J	68p	50V Ceramic	AB
C3450	VCCCCZ1HH680J	J	68p	50V Ceramic	AB
C3451	VCCCCZ1HH680J	J	68p	50V Ceramic	AB
C3463	VCCCCZ1HH750J	J	75p	50V Ceramic	AB
C3467	VCCCCY1HH101J	J	100p	50V Ceramic	AA
C4408	VCSAPD1DJ684M	J	0.68	20V Tantalum	AC
C4410	VCKYCY1HB332K	J	3300p	50V Ceramic	AA
C4419	VCCCCZ1HH120J	J	12p	50V Ceramic	AB
C6401	VCKYTV1HB222K	J	2200p	50V Ceramic	AA
C6404	VCKYTV1HB222K	J	2200p	50V Ceramic	AA
C6402	VCKYTV1CF334Z	J	0.33	16V Ceramic	AB
C6403	VCKYTV1CF334Z	J	0.33	16V Ceramic	AB
C7712	VCKYCZ1HB471K	J	470p	50V Ceramic	AB
C7713	VCKYCZ1HB471K	J	470p	50V Ceramic	AB
C7720	VCCCCZ1HH200J	J	20p	50V Ceramic	AA
C7721	VCCCCZ1HH200J	J	20p	50V Ceramic	AA

Ref. No.	Part No.	★		Description	Code
C9901	VCEAPT0JN476M	J	47	6.3V Electrolytic	AC

RESISTORS

R401	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R407	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R411	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R417	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R421	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R449	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R454	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R459	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R461	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R462	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R469	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R477	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R705	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R706	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R709	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R711	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R713	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R714	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R724	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R731	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R734	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R737	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R738	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R739	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R740	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R742	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R746	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R754	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R755	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R772	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R800	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R801	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R831	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R833	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R895	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R903	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R937	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R938	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R942	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R944	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R973	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R997	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R998	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R999	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R1414	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R1415	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R1448	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R1910	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R2746	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3414	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3441	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3442	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA

Ref. No.	Part No.	★		Description		Code
R3445	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3451	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3453	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3459	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3460	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3461	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R3470	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R4400	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R4417	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R4439	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R4444	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R4449	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7708	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7709	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7717	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7719	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7734	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7740	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7743	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R7744	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R402	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R413	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R463	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R1422	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R2429	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R2705	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R3498	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R403	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R424	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R433	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R474	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R811	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R905	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R914	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R943	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R1446	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R2425	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R3426	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R3437	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R3462	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R3476	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R6716	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R404	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R405	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R453	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R475	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R893	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R1405	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R1838	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3416	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3422	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3446	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3455	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3458	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3471	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R3472	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R4406	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R406	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R410	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R626	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R3409	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R3452	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R3475	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R4415	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R4416	VRS-CZ1JF221J	J	220	0.063W	5%	AA
R408	VRS-CZ1JF181J	J	180	0.063W	5%	AA
R409	VRS-CZ1JF181J	J	180	0.063W	5%	AA
R1709	VRS-CZ1JF181J	J	180	0.063W	5%	AA
R412	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R426	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R446	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R451	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R464	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R465	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R472	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R614	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R1462	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R1463	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R1732	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R2421	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R3433	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R3479	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R3482	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R3485	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R4424	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R414	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R890	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R909	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R952	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R1703	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R1819	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R1828	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R1831	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R3469	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R3481	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R3489	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R4422	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R4458	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R4493	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R6715	VRS-CZ1JF333J	J	33k	0.063W	5%	AA
R418	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R420	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R880	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R947	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R1410	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R1449	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R1466	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R3404	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R3430	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R3466	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R4459	VRS-CZ1JF821J	J	820	0.063W	5%	AA
R4465	VRS-CZ1JF821J	J	820	0.063W	5%	AA

Ref. No.	Part No.	★		Description		Code
R425	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R445	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R636	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R637	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R638	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R835	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R847	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R863	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R891	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R985	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1471	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1472	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1710	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1765	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1817	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R1863	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R2740	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R3439	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R4402	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R4476	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R6714	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R427	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R493	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R618	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R622	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R741	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R743	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R744	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R756	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R832	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R840	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R873	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R904	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R907	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R908	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R912	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R918	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R935	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R940	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R957	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R958	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R989	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R992	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1408	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1427	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1445	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1704	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1825	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R1842	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R2420	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R2432	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3429	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3447	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3463	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3473	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3474	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R3497	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R4420	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R4442	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R4456	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R4494	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R6410	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R6702	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R6717	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R7725	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R7726	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R7727	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R7732	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R428	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R494	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R611	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R906	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R911	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R1464	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R1835	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R1897	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R4414	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R429	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R627	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R994	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R3425	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R3444	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R3468	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R4421	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R4423	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
R430	VRS-CZ1JF563J	J	56k	0.063W	5%	AA
R3424	VRS-CZ1JF563J	J	56k	0.063W	5%	AA
R436	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R438	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R972	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R981	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R987	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R1837	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R3428	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R3438	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R4461	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R4487	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R4491	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R9951	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R443	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R466	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R630	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R802	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R821	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R872	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R874	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R1707	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R1855	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R448	VRS-CZ1JF823J	J	82k	0.063W	5%	AA
R470	VRS-CZ1JF823J	J	82k	0.063W	5%	AA
R970	VRS-CZ1JF823J	J	82k	0.063W	5%	AA
R3432	VRS-CZ1JF823J	J	82k	0.063W	5%	AA

Ref. No.	Part No.	★		Description		Code
R7729	VRS-CZ1JF823J	J	82k	0.063W	5%	AA
R450	VRS-CZ1JF184J	J	180k	0.063W	5%	AA
R1800	VRS-CZ1JF184J	J	180k	0.063W	5%	AA
R1826	VRS-CZ1JF184J	J	180k	0.063W	5%	AA
R452	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R1444	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R1896	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R3495	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R3496	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R455	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R460	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R499	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R612	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R613	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R615	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R628	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R640	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R848	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R866	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R1911	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R3407	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R4418	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R4419	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R4485	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R6409	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R6713	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R7706	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R456	VRS-CZ1JF271J	J	270	0.063W	5%	AA
R3418	VRS-CZ1JF271J	J	270	0.063W	5%	AA
R4407	VRS-CZ1JF271J	J	270	0.063W	5%	AA
R4483	VRS-CZ1JF271J	J	270	0.063W	5%	AA
R458	VRS-CZ1JF331J	J	330	0.063W	5%	AA
R497	VRS-CZ1JF331J	J	330	0.063W	5%	AA
R823	VRS-CZ1JF331J	J	330	0.063W	5%	AA
R897	VRS-CZ1JF331J	J	330	0.063W	5%	AA
R4482	VRS-CZ1JF331J	J	330	0.063W	5%	AA
R473	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R635	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R3413	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R3423	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R3434	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R3443	VRS-CZ1JF182J	J	1.8k	0.063W	5%	AA
R476	VRS-CZ1JF224J	J	220k	0.063W	5%	AA
R620	VRS-CZ1JF224J	J	220k	0.063W	5%	AA
R4401	VRS-CZ1JF224J	J	220k	0.063W	5%	AA
R478	VRS-CZ1JF274J	J	270k	0.063W	5%	AA
R4453	VRS-CZ1JF274J	J	270k	0.063W	5%	AA
R498	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R824	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R990	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R1820	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R1909	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R3449	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R4457	VRS-CZ1JF273J	J	27k	0.063W	5%	AA
R601	VRK-SA1JF561J	J	560	0.063W	5%	AC
R602	VRK-SA1JF224J	J	220k	0.063W	5%	AC
R607	VRK-SA1JF224J	J	220k	0.063W	5%	AC
R605	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R723	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R1762	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R1766	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R1767	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R1768	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R7718	VRK-SA1JF104J	J	100k	0.063W	5%	AB
R608	VRK-SA1JF822J	J	8.2k	0.063W	5%	AC
R6709	VRK-SA1JF822J	J	8.2k	0.063W	5%	AC
R609	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R629	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R747	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R748	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R749	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R868	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R869	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R955	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R956	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R1433	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R1832	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R1894	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R4471	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R6408	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R610	VRS-CZ1JF393J	J	39k	0.063W	5%	AA
R616	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R720	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R721	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R722	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R735	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R770	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R771	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R775	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R875	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R876	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R996	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R1769	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R2401	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R5401	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R6712	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R7730	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R7731	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R7750	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R7751	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R7752	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R617	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R631	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R826	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R995	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R1731	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R3410	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R3427	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R4443	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R4470	VRS-CZ1JF562J	J	5.6k	0.063W	5%	AA
R619	VRN-CZ1JF153D	J	15k	0.063W	0.5%	AA
R931	VRN-CZ1JF153D	J	15k	0.063W	0.5%	AA

Ref. No.	Part No.	★	Description			Code
R623	VRS-CZ1JF474J	J	470k	0.063W	5%	AA
R632	VRS-CZ1JF474J	J	470k	0.063W	5%	AA
R1834	VRS-CZ1JF474J	J	470k	0.063W	5%	AA
R624	VRS-CZ1JF684J	J	680k	0.063W	5%	AA
R633	VRS-CZ1JF684J	J	680k	0.063W	5%	AA
R814	VRS-CZ1JF684J	J	680k	0.063W	5%	AA
R1833	VRS-CZ1JF684J	J	680k	0.063W	5%	AA
R701	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R702	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R703	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R704	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R707	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R718	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R719	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R745	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R753	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R7716	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R7720	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R7721	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R7733	VRK-SA1JF102J	J	1.0k	0.063W	5%	AB
R725	VRS-CZ1JF822J	J	8.2k	0.063W	5%	AA
R827	VRS-CZ1JF822J	J	8.2k	0.063W	5%	AA
R1403	VRS-CZ1JF822J	J	8.2k	0.063W	5%	AA
R1417	VRS-CZ1JF822J	J	8.2k	0.063W	5%	AA
R2430	VRS-CZ1JF822J	J	8.2k	0.063W	5%	AA
R726	VRN-CZ1JF823D	J	82k	0.063W	0.5%	AA
R951	VRN-CZ1JF823D	J	82k	0.063W	0.5%	AA
R966	VRN-CZ1JF823D	J	82k	0.063W	0.5%	AA
R727	VRS-CZ1JF474F	J	470k	0.063W	1%	AB
R732	VRS-CY1JF000J	J	00	0.063W	5%	AA
R968	VRS-CY1JF000J	J	00	0.063W	5%	AA
R733	VRS-CY1JF564J	J	560k	0.063W	5%	AA
R750	VRS-CZ1JF683J	J	68k	0.063W	5%	AA
R870	VRS-CZ1JF683J	J	68k	0.063W	5%	AA
R871	VRS-CZ1JF683J	J	68k	0.063W	5%	AA
R1818	VRS-CZ1JF683J	J	68k	0.063W	5%	AA
R2403	VRS-CZ1JF683J	J	68k	0.063W	5%	AA
R773	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R2707	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R4450	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R7722	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R7753	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R7754	VRS-CZ1JF154J	J	150k	0.063W	5%	AA
R774	VRS-CZ1JF124J	J	120k	0.063W	5%	AA
R865	VRS-CZ1JF124J	J	120k	0.063W	5%	AA
R812	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R930	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R954	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R960	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R1801	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R1920	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R4469	VRN-CZ1JF183D	J	18k	0.063W	0.5%	AA
R813	VRS-CZ1JF334J	J	330k	0.063W	5%	AA
R818	VRS-CZ1JF334J	J	330k	0.063W	5%	AA
R2704	VRS-CZ1JF334J	J	330k	0.063W	5%	AA
R815	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA

Ref. No.	Part No.	★	Description			Code
R921	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R1805	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R1808	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R1913	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R1923	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R1925	VRN-CZ1JF393D	J	39k	0.063W	0.5%	AA
R817	VRN-CZ1JF563D	J	56k	0.063W	0.5%	AA
R1809	VRN-CZ1JF563D	J	56k	0.063W	0.5%	AA
R1821	VRN-CZ1JF563D	J	56k	0.063W	0.5%	AA
R1822	VRN-CZ1JF563D	J	56k	0.063W	0.5%	AA
R819	VRS-CY1JF106J	J	10M	0.063W	5%	AA
R822	VRN-CZ1JF562D	J	5.6k	0.063W	0.5%	AA
R915	VRN-CZ1JF562D	J	5.6k	0.063W	0.5%	AA
R974	VRN-CZ1JF562D	J	5.6k	0.063W	0.5%	AA
R825	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R1760	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R1761	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R1875	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R3402	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R3417	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R3420	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R4409	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R4413	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R4426	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R4481	VRS-CZ1JF681J	J	680	0.063W	5%	AA
R830	VRN-CZ1JF272D	J	2.7k	0.063W	0.5%	AA
R834	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R839	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R841	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R842	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R843	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R892	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R1429	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R2411	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R2415	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3400	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3401	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3411	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3415	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3421	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3450	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R3456	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R845	VRK-SA1JF393J	J	39k	0.063W	5%	AC
R849	VRS-CZ1JF564J	J	560k	0.063W	5%	AA
R2745	VRS-CZ1JF564J	J	560k	0.063W	5%	AA
R864	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R1869	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R3499	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R4486	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R867	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R1428	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R1432	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R1457	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R2422	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R2706	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R6405	VRS-CZ1JF473J	J	47k	0.063W	5%	AA

Ref. No.	Part No.	★		Description		Code
R6407	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R7707	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R9952	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R877	VRN-CZ1JF513D	J	51k	0.063W	0.5%	AA
R1846	VRN-CZ1JF513D	J	51k	0.063W	0.5%	AA
R879	VRN-CZ1JF433D	J	43k	0.063W	0.5%	AA
R881	VRK-SA1JF564J	J	560k	0.063W	5%	AC
R6711	VRK-SA1JF564J	J	560k	0.063W	5%	AC
R883	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R948	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R1845	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R1922	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R899	VRS-CZ1JF470J	J	47	0.063W	5%	AA
R901	VRN-CZ1JF273D	J	27k	0.063W	0.5%	AA
R902	VRN-CZ1JF472D	J	4.7k	0.063W	0.5%	AA
R910	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R959	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R3406	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R3412	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R3431	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R3486	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R4462	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R4479	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R913	VRN-CZ1JF362D	J	3.6k	0.063W	0.5%	AA
R916	VRS-CZ1JF155J	J	1.5M	0.063W	5%	AA
R923	VRS-CZ1JF155J	J	1.5M	0.063W	5%	AA
R928	VRS-CZ1JF155J	J	1.5M	0.063W	5%	AA
R929	VRS-CZ1JF155J	J	1.5M	0.063W	5%	AA
R917	VRN-CZ1JF302D	J	3.0k	0.063W	0.5%	AA
R919	VRN-CZ1JF223D	J	22k	0.063W	0.5%	AA
R926	VRN-CZ1JF223D	J	22k	0.063W	0.5%	AA
R936	VRN-CZ1JF223D	J	22k	0.063W	0.5%	AA
R950	VRN-CZ1JF223D	J	22k	0.063W	0.5%	AA
R1844	VRN-CZ1JF223D	J	22k	0.063W	0.5%	AA
R920	VRN-CZ1JF682D	J	6.8k	0.063W	0.5%	AA
R922	VRN-CZ1JF682D	J	6.8k	0.063W	0.5%	AA
R927	VRN-CZ1JF682D	J	6.8k	0.063W	0.5%	AA
R933	VRN-CZ1JF682D	J	6.8k	0.063W	0.5%	AA
R962	VRN-CZ1JF682D	J	6.8k	0.063W	0.5%	AA
R924	VRN-CZ1JF912D	J	9.1k	0.063W	0.5%	AA
R986	VRN-CZ1JF912D	J	9.1k	0.063W	0.5%	AA
R925	VRN-CZ1JF622D	J	6.2k	0.063W	0.5%	AA
R932	VRS-CZ1JF911J	J	910	0.063W	5%	AA
R934	VRN-CZ1JF123D	J	12k	0.063W	0.5%	AA
R1843	VRN-CZ1JF123D	J	12k	0.063W	0.5%	AA
R939	VRS-CY1JF820J	J	82	0.063W	5%	AA
R946	VRS-CY1JF820J	J	82	0.063W	5%	AA
R976	VRS-CY1JF820J	J	82	0.063W	5%	AA
R945	VRS-TV1JD391J	J	390	0.063W	5%	AA
R979	VRS-TV1JD391J	J	390	0.063W	5%	AA
R953	VRN-CZ1JF392D	J	3.9k	0.063W	0.5%	AA
R4427	VRN-CZ1JF392D	J	3.9k	0.063W	0.5%	AA
R965	VRN-CZ1JF683D	J	68k	0.063W	0.5%	AA
R1804	VRN-CZ1JF683D	J	68k	0.063W	0.5%	AA
R967	VRS-TV1JD471J	J	470	0.063W	5%	AA
R9902	VRS-TV1JD471J	J	470	0.063W	5%	AA

Ref. No.	Part No.	★		Description		Code
R975	VRN-CZ1JF222D	J	2.2k	0.063W	0.5%	AA
R980	VRS-TV1JD390J	J	39	0.063W	5%	AA
R982	VRS-CZ1JF100J	J	10	0.063W	5%	AA
R984	VRN-CZ1JF203D	J	20k	0.063W	0.5%	AA
R988	VRN-CZ1JF333D	J	33k	0.063W	0.5%	AA
R991	VRN-CZ1JF333D	J	33k	0.063W	0.5%	AA
R993	VRN-CZ1JF333D	J	33k	0.063W	0.5%	AA
R1812	VRN-CZ1JF333D	J	33k	0.063W	0.5%	AA
R1402	VRS-CZ1JF225J	J	2.2M	0.063W	5%	AA
R1411	VRS-CZ1JF390J	J	39	0.063W	5%	AA
R1412	VRS-CZ1JF390J	J	39	0.063W	5%	AA
R1413	VRS-CZ1JF390J	J	39	0.063W	5%	AA
R1416	VRS-CZ1JF390J	J	39	0.063W	5%	AA
R1425	VRS-CZ1JF390J	J	39	0.063W	5%	AA
R1420	VRS-CZ1JF180J	J	18	0.063W	5%	AA
R1421	VRS-CZ1JF330J	J	33	0.063W	5%	AA
R1426	VRS-CZ1JF330J	J	33	0.063W	5%	AA
R1465	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R2702	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R3405	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R3408	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R3457	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R4464	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R4480	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R6411	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R7728	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R1469	VRS-CZ1JF120J	J	12	0.063W	5%	AB
R1470	VRS-CZ1JF120J	J	12	0.063W	5%	AB
R1700	VRS-CY1JF1R0J	J	1.0	0.063W	5%	AA
R1701	VRS-CY1JF1R0J	J	1.0	0.063W	5%	AA
R1702	VRS-CY1JF1R0J	J	1.0	0.063W	5%	AA
R1708	VRS-CY1JF1R0J	J	1.0	0.063W	5%	AA
R1705	VRS-TV1JD000J	J	00	0.063W	5%	AA
R1720	VRS-TQ2BDR20J	J	0.2	1/8W	5%	AA
R1721	VRS-TQ2BDR20J	J	0.2	1/8W	5%	AA
R1722	VRS-TQ2BDR20J	J	0.2	1/8W	5%	AA
R1730	VRS-CZ1JF203J	J	20k	0.063W	5%	AA
R1802	VRN-CZ1JF113D	J	11k	0.063W	0.5%	AA
R1807	VRN-CZ1JF363D	J	36k	0.063W	0.5%	AA
R1824	VRN-CZ1JF104D	J	100k	0.063W	0.5%	AA
R1836	VRS-CZ1JF752J	J	7.5k	0.063W	5%	AA
R1847	VRS-CZ1JF913J	J	91k	0.063W	5%	AA
R1891	VRN-CZ1JF121D	J	120	0.063W	0.5%	AA
R1892	VRS-CY1JFR22J	J	0.22	0.063W	5%	AA
R1895	VRN-CZ1JF332D	J	3.3k	0.063W	0.5%	AA
R4428	VRN-CZ1JF332D	J	3.3k	0.063W	0.5%	AA
R4460	VRN-CZ1JF332D	J	3.3k	0.063W	0.5%	AA
R2419	VRN-CZ1JF913D	J	91k	0.063W	0.5%	AA
R2701	VRS-CZ1JF335J	J	3.3M	0.063W	5%	AA
R3403	VRS-CZ1JF391J	J	390	0.063W	5%	AA
R4484	VRS-CZ1JF391J	J	390	0.063W	5%	AA
R3419	VRS-CZ1JF151J	J	150	0.063W	5%	AA
R3454	VRN-CZ1JF241D	J	240	0.063W	0.5%	AA
R3467	VRS-CZ1JF123J	J	12k	0.063W	5%	AA
R6404	VRS-CZ1JF123J	J	12k	0.063W	5%	AA
R6406	VRS-CZ1JF123J	J	12k	0.063W	5%	AA

Ref. No.	Part No.	★	Description			Code
R4404	VRS-CZ1JF820J	J	82	0.063W	5%	AA
R4430	VRN-CZ1JF391D	J	390	0.063W	0.5%	AA
R4435	VRN-CZ1JF471D	J	470	0.063W	0.5%	AA
R4454	VRS-CZ1JF394J	J	390k	0.063W	5%	AA
R4466	VRK-SA1JF103J	J	10k	0.063W	5%	AB
R4468	VRN-CZ1JF122D	J	1.2k	0.063W	0.5%	AA
R6401	VRK-SA1JF563J	J	56k	0.063W	5%	AC
R6402	VRS-TV1JD151J	J	150	0.063W	5%	AA
R6403	VRS-TV1JD151J	J	150	0.063W	5%	AA
R6701	VRK-SA1JF392J	J	3.9k	0.063W	5%	AC
R6708	VRK-SA1JF392J	J	3.9k	0.063W	5%	AC
R6703	VRK-SA1JF112J	J	1.1k	0.063W	5%	AC
R6704	VRK-SA1JF474J	J	470k	0.063W	5%	AC
R6705	VRK-SA1JF474J	J	470k	0.063W	5%	AC
R6706	VRK-SA1JF473J	J	47k	0.063W	5%	AC
R7710	VRS-CZ1JF560J	J	56	0.063W	5%	AA
R7711	VRS-CZ1JF560J	J	56	0.063W	5%	AA
R9910	VRS-TV1JD102J	J	1.0k	0.063W	5%	AA
R9954	VRS-TV1JD221J	J	220	0.063W	5%	AA

MISCELLANEOUS PARTS

					Code
FB900	RBLN-0064TAZZ	J	Balun		AC
FB901	RBLN-0064TAZZ	J	Balun		AC
FB902	RBLN-0064TAZZ	J	Balun		AC
FB903	RBLN-0064TAZZ	J	Balun		AC
FB904	RBLN-0064TAZZ	J	Balun		AC
⚠ F901	QFS-L4021TAZZ	J	Fuse		AE
P1	QCNCM7054TAZZ	J	Connector		AL
P703	QPLGN0263TAZZ	J	Plug		AB
P2702	QPLGN0963TAZZ	J	Plug		AE
P6603	QPLGN0763TAZZ	J	Plug		AD
SC702	QSOCN1278TAZZ	J	Socket		AE
SC704	QSOCN1565TAZZ	J	Socket		AE
SC705	QSOCN1665TAZZ	J	Socket		AE
SC801	QSOCN1866TAZZ	J	Socket		AE
SC802	QSOCN0766TAZZ	J	Socket		AD
SC1401	QSOCN2066TAZZ	J	Socket		AE
SC1701	QSOCN1078TAZZ	J	Socket		AD
SC6702	QSOCN1065TAZZ	J	Socket		AE
SLD	PSLDM3208TAMS	J	Shield		AD
SLD	PSLDM3209TAMS	J	Shield		AD

CABINET PARTS

				Code
PWB	QPWBX2507TAZZ	J	Printed Wiring Board	BA

DUNTK2516QA03 CAMERA P.W.B. (VL-H420S/H/4200S)
DUNTK2516QA04 CAMERA P.W.B. (VL-H420X/90E)

INTEGRATED CIRCUITS

				Code
IC11	VHiCXD1267N-1	J	CXD1267N	AR
IC12	VHiLZ9AB15/-1	J	LZ9AB15	AR
IC101	VHiCXA1690Q-1	J	CXA1690Q/-T4	AU
IC102	VHiHD49315A-1	J	HD49315AF	AX
IC201	RH-iX0224TAZZ	J	HG51B163TF	BA
IC202	VHiMM1304XF-1	J	MM1304XJFE	AL
IC251	RH-iX0269TAZZ	J	LR38195	BL
IC252	VHiCK48324R-1	J	CXK48324R	BB
IC253	VHiMB8115011E	J	MB81C1501PF	BB
IC501	RH-iX0308TAZZ	J	UPD784026GC114	AX
IC502	VHi24LC4BiN-1	J	24LC04BT-I/SN	AL
IC503	VHiMB8346BV-1	J	MB88346BPFV	AN
IC504	VHiPST592iM-1	J	IC-PST592IMT	AE
IC551	VHiMM1299XQ-1	J	MM1299XQ	AV

TRANSISTORS

				Code
Q11	VSUMX2/////-1	J	Transistor	AB
Q202	VSUMX2/////-1	J	Transistor	AB
Q101	VS2SC4617B/-1	J	Transistor	AA
Q551	VS2SC4617B/-1	J	Transistor	AA
Q201	VS2SA1774F/-1	J	Transistor	AA
Q251	VS2SA1577//-1	J	Transistor	AC
Q501	VSUMG2/////-1	J	Transistor	AC
Q502	VSDTC144EE/-1	J	Transistor	AA
Q552	VSUMT2/////-1	J	Transistor	AB

DIODES AND LED'S

				Code
D501	VHDDA121///-1	J	Diode	AA

PACKAGED CIRCUITS

				Code
X11	RCRSZ0028TAZZ	J	Crystal	AQ

COIL AND TRANSFORMERS

						Code
CF501	RFILC0060TAZZ	J	Filter			AF
FL251	RFILN0082CEZZ	J	Filter			AC
L11	VPAWM1R0JR70N	J	Peaking	1µH	5%	AC
L12	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L201	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L203	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L204	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L501	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L502	VPAEM100K1R3N	J	Peaking	10µH	10%	AC
L13	VPAEM470K5R4N	J	Peaking	47µH	10%	AC
L102	VPAEM470K5R4N	J	Peaking	47µH	10%	AC
L103	VPAEM470K5R4N	J	Peaking	47µH	10%	AC
L101	VPAEM220K2R9N	J	Peaking	22µH	10%	AC
L252	VPAEM220K2R9N	J	Peaking	22µH	10%	AC
L205	VPAXM220KR88N	J	Peaking	22µH	10%	AC

CAPACITORS

						Code
C11	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C12	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C503	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C13	VCSATE1EJ475M	J	4.7	25V	Tantalum	AD
C14	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C21	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C22	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C26	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C30	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C32	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA

Ref. No.	Part No.	★			Description	Code
C104	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C106	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C111	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C112	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C113	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C217	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C219	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C220	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C255	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C257	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C259	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C260	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C262	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C263	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C264	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C506	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C507	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C555	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C556	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C560	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C564	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C16	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C17	VCSATC1VJ685M	J	6.8	35V	Tantalum	AF
C18	VCKYTV1EF224Z	J	0.22	25V	Ceramic	AA
C23	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C29	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C33	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C107	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C108	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C201	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C207	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C210	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C212	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C216	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C261	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C501	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C24	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C27	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C25	VCSATA1AJ475M	J	4.7	10V	Tantalum	AC
C557	VCSATA1AJ475M	J	4.7	10V	Tantalum	AC
C565	VCSATA1AJ475M	J	4.7	10V	Tantalum	AC
C28	VCCCCY1HH6R0D	J	6.0p	50V	Ceramic	AA
C101	VCKYTQ1CB105K	J	1.0	16V	Ceramic	AC
C102	VCKYTQ1CB105K	J	1.0	16V	Ceramic	AC
C103	VCKYTQ1CB105K	J	1.0	16V	Ceramic	AC
C105	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C109	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C110	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C114	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C115	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C116	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C117	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C202	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C205	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C206	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C209	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA

Ref. No.	Part No.	★			Description	Code
C211	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C213	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C215	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C252	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C253	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C256	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C258	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C502	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C505	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C119	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C566	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C121	VCCCCY1HH470J	J	47p	50V	Ceramic	AA
C203	VCKYCY1HB222K	J	2200p	50V	Ceramic	AA
C208	VCKYCY1HB222K	J	2200p	50V	Ceramic	AA
C214	VCKYCY1AF105Z	J	1.0	10V	Ceramic	AC
C265	VCKYCY1AF105Z	J	1.0	10V	Ceramic	AC
C552	VCKYCY1AF105Z	J	1.0	10V	Ceramic	AC
C251	VCSATE1AJ226M	J	22	10V	Tantalum	AD
C254	VCSATE1AJ226M	J	22	10V	Tantalum	AD
C551	VCEAPF1AW226M	J	22	10V	Electrolytic	AB
C554	VCEAPF1AW226M	J	22	10V	Electrolytic	AB
C553	VCKYCY1HB472K	J	4700p	50V	Ceramic	AA
C567	VCKYCY1HB472K	J	4700p	50V	Ceramic	AA
C568	VCKYCY1HB472K	J	4700p	50V	Ceramic	AA
C569	VCKYCY1HB472K	J	4700p	50V	Ceramic	AA
C558	VCCCCY1HH121J	J	120p	50V	Ceramic	AA
C562	VCCCCY1HH121J	J	120p	50V	Ceramic	AA
C559	VCKYCY1CF224Z	J	0.22	16V	Ceramic	AA
C561	VCKYCY1CB333K	J	0.033	16V	Ceramic	AA
C563	VCKYCY1HB122K	J	1200p	50V	Ceramic	AA
C570	VCKYCY1EB183K	J	0.018	25V	Ceramic	AA

RESISTORS

R14	VRS-CZ1JF271J	J	270	0.063W	5%	AA
R17	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R18	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R22	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R46	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R226	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R227	VRS-CZ1JF101J	J	100	0.063W	5%	AA
R19	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R20	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R102	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R117	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R211	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R220	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R502	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R504	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R505	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R507	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R514	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R515	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R516	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R519	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R524	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA

Ref. No.	Part No.	★	Description			Code
R529	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R530	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R531	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R536	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R540	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R541	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R542	VRS-CZ1JF102J	J	1.0k	0.063W	5%	AA
R25	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R567	VRS-CZ1JF105J	J	1.0M	0.063W	5%	AA
R26	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R33	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R35	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R48	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R111	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R113	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R114	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R201	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R214	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R216	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R221	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R511	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R512	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R565	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R566	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R585	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R587	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R589	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R595	VRS-CZ1JF000J	J	00	0.063W	5%	AA
R27	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R116	VRS-CZ1JF561J	J	560	0.063W	5%	AA
R30	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R44	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R212	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R264	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R508	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R523	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R532	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
			(VL-H420S/H/4200S)			
R533	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
			(VL-H420X/90E)			
R560	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R563	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R573	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R577	VRS-CZ1JF103J	J	10k	0.063W	5%	AA
R31	VRS-CZ1JF330J	J	33	0.063W	5%	AA
R39	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R253	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R503	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R506	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R534	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R590	VRS-CZ1JF222J	J	2.2k	0.063W	5%	AA
R40	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R104	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R554	VRS-CZ1JF153J	J	15k	0.063W	5%	AA
R41	VRS-CY1JF000J	J	00	0.063W	5%	AA
R42	VRS-CY1JF000J	J	00	0.063W	5%	AA
R218	VRS-CY1JF000J	J	00	0.063W	5%	AA
R501	VRS-CY1JF000J	J	00	0.063W	5%	AA
R549	VRS-CY1JF000J	J	00	0.063W	5%	AA
R101	VRS-CZ1JF122J	J	1.2k	0.063W	5%	AA
R103	VRS-CZ1JF473J	J	47k	0.063W	5%	AA
R105	VRS-CZ1JF123J	J	12k	0.063W	5%	AA
R107	VRS-CZ1JF153F	J	15k	0.063W	1%	AA
R571	VRS-CZ1JF153F	J	15k	0.063W	1%	AA
R108	VRS-CZ1JF244F	J	240k	0.063W	1%	AA
R572	VRS-CZ1JF244F	J	240k	0.063W	1%	AA
R109	VRS-CZ1JF393J	J	39k	0.063W	5%	AA
R110	VRS-CZ1JF220J	J	22	0.063W	5%	AA
R206	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R208	VRS-CZ1JF471J	J	470	0.063W	5%	AA
R207	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R546	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R547	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R548	VRS-CZ1JF272J	J	2.7k	0.063W	5%	AA
R215	VRS-CZ1JF103F	J	10k	0.063W	1%	AB
R219	VRS-CZ1JF472J	J	4.7k	0.063W	5%	AA
R222	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R223	VRS-CZ1JF152J	J	1.5k	0.063W	5%	AA
R251	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R252	VRS-CZ1JF104J	J	100k	0.063W	5%	AA
R525	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R535	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R543	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R544	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R545	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R583	VRS-CZ1JF223J	J	22k	0.063W	5%	AA
R533	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
			(VL-H420S/H/4200S)			
R532	VRS-CZ1JF183J	J	18k	0.063W	5%	AA
			(VL-H420X/90E)			
R538	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R539	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R568	VRS-CZ1JF332J	J	3.3k	0.063W	5%	AA
R558	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R559	VRN-CZ1JF103D	J	10k	0.063W	0.5%	AA
R561	VRN-CZ1JF104D	J	100k	0.063W	0.5%	AA
R562	VRN-CZ1JF473D	J	47k	0.063W	0.5%	AA
R569	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R570	VRS-CZ1JF682J	J	6.8k	0.063W	5%	AA
R574	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R575	VRS-CZ1JF392J	J	3.9k	0.063W	5%	AA
R576	VRS-CZ1JF180J	J	18	0.063W	5%	AA
R584	VRS-CZ1JF391J	J	390	0.063W	5%	AA
R591	VRS-CZ1JF121J	J	120	0.063W	5%	AA
R592	VRS-CZ1JF121J	J	120	0.063W	5%	AA

MISCELLANEOUS PARTS

P8	QCNCM2652TAZZ	J	Connector	AF
SC2	QSOCN1665TAZZ	J	Socket	AE
SC4	QSOCN1665TAZZ	J	Socket	AE
SC3	QSOCN1566TAZZ	J	Socket	AE

Ref. No.	Part No.	★	Description	Code
SC5	QSOCN1060TAZZ	J	Socket	AD
SC7	QSOCN2866TAZZ	J	Socket	AF
SLD	PSLDM3204TAFW	J	Shield	AC
SLD	PSLDM3205TAFW	J	Shield	AC

RCCD-0004TAN0 CCD P.W.B.

INTEGRATED CIRCUITS

IC1	VHiLZ2453A5-1	J	I.C.	BP

TRANSISTORS

Q1	VS2SK160///-1	J	Transistor	AD
Q2	VS2SC4627CD-1	J	Transistor	AB

DIODES

D1	VHDDA121///-1	J	Diode	AA

CAPACITORS

C1	VCSAPH1DJ225M	J	2.2µH 20V	AB
C2	VCKYCY1HF103Z	J	0.01µH 50V	AA
C3	VCSATE1VJ335M	J	3.3µH 35V	AD
C4	VCCCCY1HH221J	J	220pF Ceramic	AA
C5	VCKYCY1HB102K	J	0.001µF Ceramic	AA
C6	VCKYTV1CF225Z	J	2.2µF 16V	AC
C7	VCCCCY1HH100D	J	10pF Ceramic	AA

RESISTORS

R1	VRS-CY1JF822J	J	8.2K	AA
R2	VRS-CY1JF101J	J	100	AA
R3	VRS-CY1JF472J	J	4.7K	AA
R4	VRS-CY1JF000J	J	0	AA
R5	VRS-CY1JF000J	J	0	AA
R6	VRS-CY1JF682J	J	6.8K	AA
R7	VRS-CY1JF104J	J	100K	AA
R8	VRS-CY1JF473J	J	47K	AA
R9	VRS-CY1JF105J	J	1M	AA

RAMP-0005TAN1 HEAD AMP UNIT

INTEGRATED CIRCUITS

IC301	VHiM52369FP-1	J	H/A IC	AR
IC302	VHiST93C46T-1	J	Memory IC	AF

TRANSISTORS

Q301	VSDTA114EE/-1	J	Transistor	AB
Q302	VS2SC3931C/-1	J	Transistor	AB
Q303	VS2SC3931C/-1	J	Transistor	AB
Q304	VSXP6501///-1	J	Transistor	AB
	or			
	VSUMX2/////-1	J	Transistor	AB
Q307	VS2SC4738Y/-1	J	Transistor	AA
Q310	or			
	VS2SC4617B/-1	J	Transistor	AA
Q311	VS2SA1037KQ-1	J	Transistor	AA
Q312	VS2SA1037KQ-1	J	Transistor	AA
Q313	VSDTC144EE/-1	J	Transistor	AA
Q315	VSUMG2/////-1	J	Transistor	AC

COILS

L301	VPABM100J2R6N	J	Peaking	AC
	or			
	VPAWM100J2R6N	J	Peaking	AC
L302	VPABM101J160N	J	Peaking	AC
	or			
	VPAWM101J140N	J	Peaking	AC
L303	VP-NM220K1R0N	J	Peaking	AB
L304	or			
	VPAXM220KR88N	J	Peaking	AC

CAPACITORS

C301	VCKYCY1HF103Z	J	Capacitor	AA
C302	VCKYCY1HF103Z	J	Capacitor	AA
C303	VCKYCY1HF103Z	J	Capacitor	AA
C304	VCKYCY1HF103Z	J	Capacitor	AA
C309	VCKYCY1HF103Z	J	Capacitor	AA
C310	VCKYCY1HF103Z	J	Capacitor	AA
C311	VCKYCY1HF103Z	J	Capacitor	AA
C313	VCKYCY1HF103Z	J	Capacitor	AA
C314	VCKYCY1HF103Z	J	Capacitor	AA
C318	VCKYCY1HF103Z	J	Capacitor	AA
C320	VCKYCY1HF103Z	J	Capacitor	AA
C321	VCKYCY1HF103Z	J	Capacitor	AA
C322	VCKYCY1HF103Z	J	Capacitor	AA
C324	VCKYCY1HF103Z	J	Capacitor	AA
C326	VCKYCY1HF103Z	J	Capacitor	AA
C338	VCKYCY1HF103Z	J	Capacitor	AA
C315	VCKYCY1HB102K	J	Capacitor	AA
C319	VCKYCY1EB103K	J	Capacitor	AA
C323	VCKYCY1EB103K	J	Capacitor	AA
C327	VCSATE1AJ336M	J	Tantalum	AG
C328	VCCCCY1HH101J	J	Capacitor	AA
C330	VCCCCY1HH101J	J	Capacitor	AA
C331	VCCCCY1HH101J	J	Capacitor	AA
C329	VCCCCY1HH151J	J	Capacitor	AA
C332	VCKYCY1CF104Z	J	Capacitor	AA
C335	VCKYCY1CF104Z	J	Capacitor	AA

VL-H420S/H/X
VL-H4200S/H90E

Ref. No.	Part No.	★	Description	Code
C345	VCSATA1AJ106M	J	Tantalum	AC
C352	VCCCCY1HH680J	J	Capacitor	AA

RESISTORS

R301	VRS-CY1JF562J	J	Resistor	AA
R305	VRS-CY1JF562J	J	Resistor	AA
R309	VRS-CY1JF562J	J	Resistor	AA
R303	VRS-CY1JF154J	J	Resistor	AA
R304	VRS-CY1JF563J	J	Resistor	AA
R307	VRS-CY1JF563J	J	Resistor	AA
R308	VRS-CY1JF563J	J	Resistor	AA
R311	VRS-CY1JF563J	J	Resistor	AA
R315	VRS-CY1JF563J	J	Resistor	AA
R306	VRS-CY1JF102J	J	Resistor	AA
R321	VRS-CY1JF102J	J	Resistor	AA
R331	VRS-CY1JF102J	J	Resistor	AA
R312	VRS-CY1JF823J	J	Resistor	AA
R313	VRS-CY1JF183J	J	Resistor	AA
R316	VRS-CY1JF103J	J	Resistor	AA
R342	VRS-CY1JF103J	J	Resistor	AA
R360	VRS-CY1JF103J	J	Resistor	AA
R317	VRS-CY1JF223J	J	Resistor	AA
R318	VRS-CY1JF223J	J	Resistor	AA
R349	VRS-CY1JF223J	J	Resistor	AA
R370	VRS-CY1JF223J	J	Resistor	AA
R371	VRS-CY1JF223J	J	Resistor	AA
R323	VRS-CY1JF753J	J	Resistor	AA
R329	VRS-CY1JF101J	J	Resistor	AA
R337	VRS-CY1JF331J	J	Resistor	AA
R338	VRS-CY1JF331J	J	Resistor	AA
R335	VRS-CY1JF331J	J	Resistor	AA
R340	VRS-CY1JF331J	J	Resistor	AA
R339	VRS-CY1JF100F	J	Resistor	AA
R341	VRS-CY1JF393J	J	Resistor	AA
R343	VRS-CY1JF182J	J	Resistor	AA
R344	VRS-CY1JF680J	J	Resistor	AA
R345	VRS-CY1JF271J	J	Resistor	AA
R346	VRS-CY1JF221J	J	Resistor	AA
R350	VRS-CY1JF333J	J	Resistor	AA
R359	VRS-CY1JF471J	J	Resistor	AA
R361	VRS-CY1JF473J	J	Resistor	AA
R362	VRS-CY1JF473J	J	Resistor	AA
R399	VRS-TV1JD561J	J	Resistor	AA

MICELLANEOUS PARTS

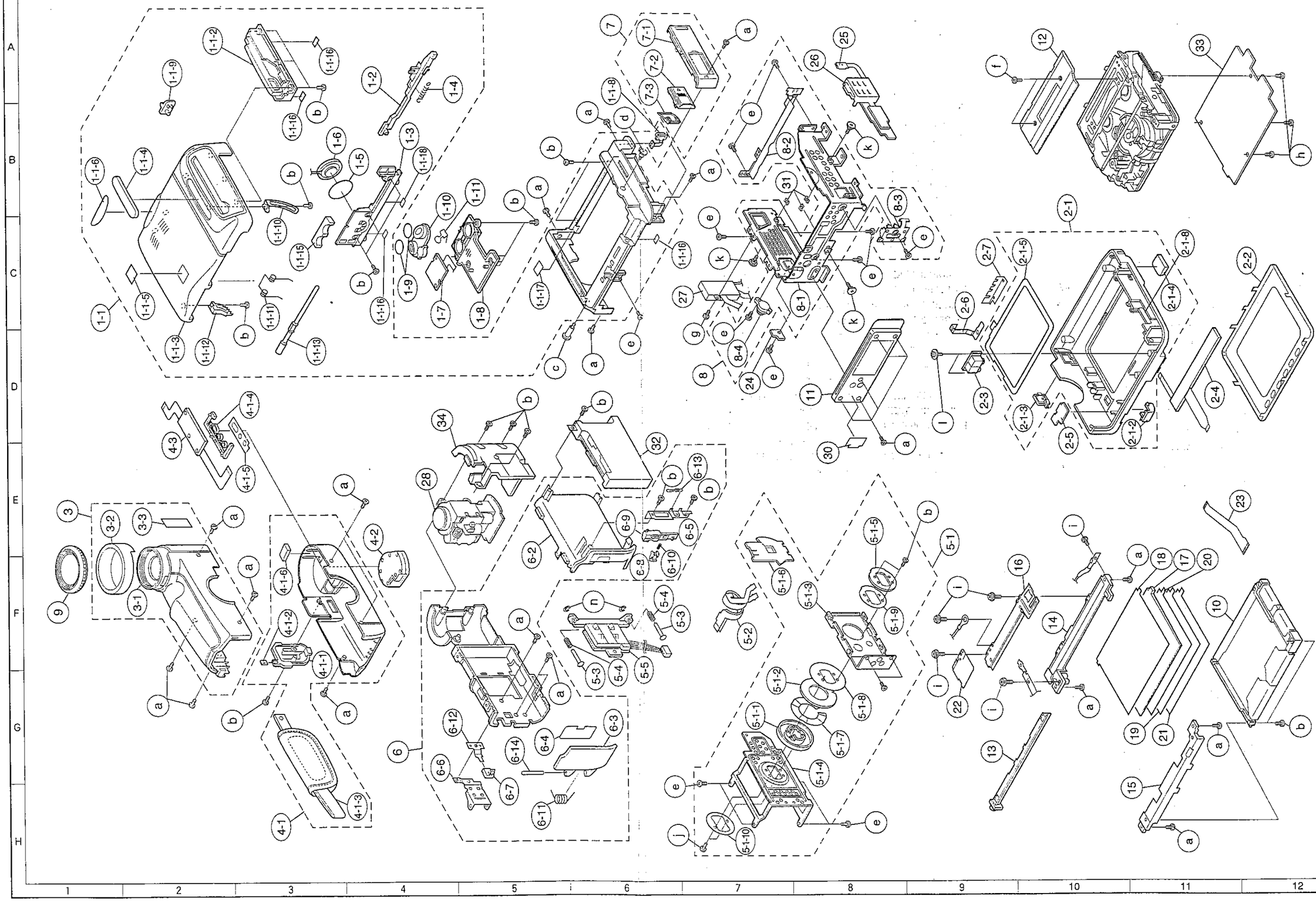
SC301	QSOCN0948TAZZ	J	Connector	AD
SC302	QSOCN1865TAZZ	J	Connector	AE
SC303	QSOCN1865TAZZ	J	Connector	AE
SC304	QSOCN0665TAZZ	J	Connector	AD
SC305	QCNCW7054TAZZ	J	Connector	AD

OTHERS PARTS

SPAKC6484TAZZ	J	Packing Case (VL-H420S)	—
SPAKC6485TAZZ	J	Packing Case (VL-H420H)	—
SPAKC6486TAZZ	J	Packing Case (VL-H420X)	—
SPAKC6488TAZZ	J	Packing Case (VL-H4200S)	—
SPAKC6487TAZZ	J	Packing Case (VL-H90E)	—
SPAKP6049TAZZ	J	Wrapping Paper	—
SSAKA0086TAZZ	J	Polyethylene Bag	—
TCADN0071TAZZ	J	Card (VL-H420S/H/4200S)	—
TCADN0070TAZZ	J	Card (VL-H420X)	—
TGANL0004TAZZ	J	Guarantee Card (VL-H420S/H/4200S)	—
TGANE0050TAZZ	J	Guarantee Card (VL-H420X)	—
TINSL0044TAZZ	J	Instruction Book (VL-H420S)	—
TINSE0154TAZZ	J	Instruction Book (VL-H420H)	—
TINSE0196TAZZ	J	Instruction Book (VL-H420H)	—
TINSE0201TAZZ	J	Instruction Book (VL-H420H)	—
TINSE0197TAZZ	J	Instruction Book (VL-H420X)	—
TINSL0045TAZZ	J	Instruction Book (VL-H4200S)	—
TINSZ1425TAZZ	J	Instruction Book (VL-H90E)	—
PNNOK0005TAZZ	J	Cleaning Cloth	AD
RRMCG0040TASA	J	Infrared R/C (VL-H420S/H/X, H4200S)	AQ
RRMCG0023TASA	J	Infrared R/C (VL-H90E)	AS
QPLGA0007GEZZ	J	Plug Adapter (VL-H90E)	AH

VL-H420S/H/X
VL-H4200S/H90E

CABINET EXPLODED VIEW



CABINET PARTS LIST

★MARK: SPARE PARTS DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
1-1	DCABA6130TA06	J	V Cabinet Ass'y (H420S/H/X)	BB
	DCABA6130TA07	J	V Cabinet Ass'y (H4200S)	BC
	DCABA6130TA08	J	V Cabinet Ass'y (H90E)	BB
1-2	LHLDZ1274TAZZ	J	VTR Lid Lock	AD
1-3	LHLDZ1276TAZZ	J	Speaker Holder	AD
1-4	MSPRT0028TAFJ	J	VTR Lid Lock Spring	AC
1-5	PCOVP9046TAZZ	J	Speaker Mesh B	AA
1-6	VSP0028P-378N	J	Speaker	AL
1-7	DUNTK2504QA00	J	Microphone Amp Unit	—
1-8	LHLDZ1275TAZZ	J	Microphone Holder	AD
1-9	PMLT-0105TAZZ	J	Microphone Molt	AA
1-10	PMICC0060TAZZ	J	Mic Unit	AT
1-11	QCNW-1366TAZZ	J	Mic Sheeld	AE
1-1-2	CLEGM0021TA01	J	Stand Unit	AN
1-1-3	GFTAC1182TASA	J	VTR Lid (H420S/X)	AS
	GFTAC1188TASA	J	VTR Lid (H420H)	AS
	GFTAC1189TASA	J	VTR Lid (H4200S)	AQ
	GFTAC1190TASA	J	VTR Lid (H90E)	AS
1-1-4	GPAD-0012TASA	J	Grip Band A	AG
1-1-5	HBDGS0056TASA	J	LCD Badge	AD
1-1-6	HDECB0231TASB	J	SHARP Badge (H420S/H/X, H90E)	AL
	HDECB0231TASC	J	SHARP Badge (H4200S)	AL
1-1-8	JBTN-0237TASA	J	Eject Button	AD
1-1-9	JKNBP0105TASA	J	Open Knob	AC
1-1-10	LSTYM0007TAFW	J	Stay	AC
1-1-11	MSPRD0031TAFJ	J	VTR Lid Spring	AC
1-1-12	NGERH1024TAZZ	J	Damper gear	AC
1-1-13	NSFTZ0040TASA	J	VTR Lid Shaft	AC
1-1-15	PMLT-0106TAZZ	J	Sound Insulation Sheet A	AB
1-1-16	PSPAZ0096TAZZ	J	VTR Lid Cusion	AB
1-1-17	TLABH0210TAZZ	J	Litium Exchange Label	AA
1-1-18	PSPAZ0107TAZZ	J	VTR Lid Cusion B	AC
2-1	DCABB6131TA01	J	LCD Cabinet Ass'y	AS
2-1-2	GCOVA1352TAZZ	J	Remote Control Light Reception Cover	AC
2-1-3	GFTAS1009TASA	J	Lamp Exchange Lid	AC
2-1-4	GPAD-0013TASA	J	Grip Band B	AD
2-1-5	QEARP0175TAZZ	J	LCD Earth Plate	AF
2-1-8	PZETE0016TAZZ	J	Sheet	AA
2-2	HDECA0680TASA	J	LCD Decoration Plate (H420S/H/X, H90E)	AV
	HDECA0680TASC	J	LCD Decoration Plate (H4200S)	AS
2-3	QJAKZ0025TAZZ	J	Jack Unit	AN
2-4	QSW-Z0191TAZZ	J	VTR Operation Unit	AR
2-5	RRMCK0016TAZZ	J	Remote Control Unit	AN
2-6	QEARP0180TAFJ	J	LCD Earth Spring	AB
2-7	PCOVU9026TAZZ	J	Light Shild Cover	AC
3	CCABC6048TA01	J	KS Camera Front Cabinet Ass'y (H420S/H/X, H90E)	AR
	CCABC6048TA03	J	KS Camera Front Cabinet Ass'y (H4200S)	AR
3-2	GCOVA1339TASB	J	Lens Decoration Cover	AF
3-3	TLABH0168TAZZ	J	Facing Recording Label	AA
4-1	DCABD6048TA01	J	KS Camera Back Cabinet	BA
4-1-1	GCOVA1340TASA	J	Hand Strap Upper Cover	AE
4-1-2	LX-NZ0076TAFW	J	Squre Nut	AB
4-1-3	UBNDT0081TASA	J	Hand Strap	AU
4-1-4	JBTN-0241TASA	J	Camera Operation Button	AE
4-1-5	PSPAH0018TA00	J	Camera Operation Button Spacer	AB
4-1-6	PSPAG0072TA00	J	Camera Back Cabinet Specer	AB
4-2	QSW-Z0182TAZZ	J	Zoom Switch Unit	AU
4-3	QSW-Z0172TAZZ	J	Camera Operation Switch	AN
5-1	DANGF0304TA04	J	Tilt Ass'y	AR
5-1-1	GDAI-1042TASA	J	Rotetion Axle	AD
5-1-2	LANGF0305TAFW	J	Specer Axle	AC
5-1-3	LANGF0306TAFW	J	Tilt Frame V	AF
5-1-4	LANGF0304TAFW	J	Tilt Frame C	AG
5-1-5	LANGH0057TAFW	J	Positioning Plate	AD
5-1-6	LHLDW1031TA00	J	FPC Holder	AC
5-1-7	MSPRP0135TAFJ	J	Tilt Plate Spring	AC
5-1-8	PSPAZ0103TAZZ	J	Turn Sheet A	AC
5-1-9	PSPAZ0104TAZZ	J	Turn Sheet B	AD
5-1-10	LANGH0058TAFW	J	Tilt Flame C Reinforcing Fitting	AC
5-2	QPWBH2499TAZZ	J	VTR Camera FPC	AT
5-3	NSFTZ0046TAFW	J	Battery Push-out Shaft	AC
5-4	MSPRC0067TAFJ	J	Battery Push-out Spring	AA
5-5	QTANZ0077TAZZ	J	Battery Terminal Unit	AN
6	CHLDZ1269TA01	J	Battery Holder Ass'y	AW
6-2	LHLDZ1260TASA	J	Battery Holder B	AL
6-3	GFTAB1043TASA	J	Battery Lid	AG
6-4	HDECP0033TASA	J	Battery Decoration Plate	AD
6-5	LANGK0312TA00	J	Battery Lid Lever Fitting	AD
6-6	LANGK0313TA00	J	Battery Lid Axle Fitting	AF
6-7	LHLDZ1262TA00	J	Battery Intermediate Lock	AC
6-8	MLEVP0015TASA	J	Battery Lock Lever	AC
6-9	MLEVP0016TASA	J	Battery Lid Lever	AC
6-10	MSPRC0064TAFJ	J	Battery Lock Spring	AA
6-11	MSPRD0030TAFF	J	Battery Lid Spring	AB
6-12	MSPRP0136TAFJ	J	Battery Intermediate Lock Spring	AB
6-13	MSPRT0027TAFJ	J	Battery Lid Spring	AB
6-14	NSFTZ0038TA00	J	Battery Lid Axle	AD
7	CCOVA1345TA01	J	Grip Cover Ass'y	AL
7-1	GCOVA1345TASA	J	Grip Cover	AG
7-2	GCOVH1133TASA	J	Terminal Cover B	AD
7-3	MSPRP0125TAFJ	J	Terminal Cover Spring B	AC
8	CANGF0301TA02	J	MH Frame Ass'y	AQ
8-1	LANGF0301TAFW	J	MH Frame	AH
8-2	LANGF0302TAFW	J	MH Sub Angle	AD
8-3	LANGK0315TAFW	J	System Connecter Angle	AE
8-4	PDMPF1006TAZZ	J	Damper	AF
9	GCOVH1151TASB	J	Lens Protect Cover	AR
10	CPNLC0013RM01	J	LCD Panel	CE
11	GCOVA1350TASA	J	Bottom Cover	AH
12	GFTAC1151TASA	J	Cassette Control Lid	AF
13	KLMPV0014TAZZ	J	Lamp Unit	AZ

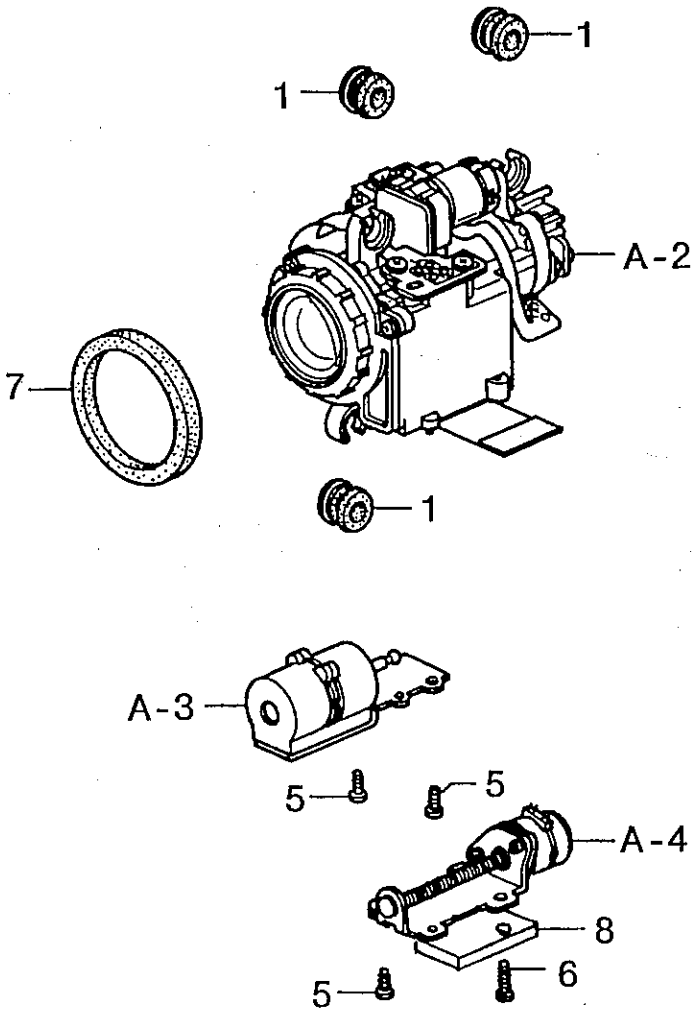
★MARK: SPARE PARTS DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
14	LHLDZ1264TAZZ	J	Frame Holder A	AD
15	LHLDZ1265TAZZ	J	Frame Holder B	AC
16	MSPRP0137TAFJ	J	Light Guide Set Spring	AD
17	PGIDM0019TAZZ	J	Light Guide	AK
18	PMiR-0014TAZZ	J	Reverberation Sheet	AD
19	PSHEP0004TAZZ	J	Prism Sheet	AM
20	PSHEP0006TAZZ	J	Diffusion Sheet	AE
21	PSHEP0010TAZZ	J	Wide-angle Sheet	AF
22	PZETV0306TAZZ	J	Lamp Terminal Insulator Sheet	AB
23	QPWBH4865GEZZ	J	LCD FPC	AH
24	QSW-Z0152TAZZ	J	Turn Switch Unit	AH
25	QTANZ0078TAZZ	J	System Terminal Unit	AU
26	LHLDB1016TAZZ	J	Litium Battery Holder	AC
27	RiNV-0010TAZZ	J	Inverter Unit	AY
28	CLNSA0121TA01	J	Lens Unit	BT
30	TLABM1576TAZZ	J	Model Label (H420S)	AC
	TLABM1580TAZZ	J	Model Label (H4200S)	AC
	TLABM1578TAZZ	J	Model Label (H420X)	AC
	TLABM1579TAZZ	J	Model Label (H90E)	AC
	TLABM1577TAZZ	J	Model Label (H420H)	AC
31	PSPAN0021TAZZ	J	Floating Spacer	AC
32	DUNTK2516QA03	J	Camera P.W.B. Unit (H420S/H, H4200S)	—
	DUNTK2516QA04	J	Camera P.W.B. Unit (H420X, H90E)	—
33	DUNTK2507QA03	J	VTR P.W.B. Unit (H420S)	—
	DUNTK2507QA05	J	VTR P.W.B. Unit (H420H)	—
	DUNTK2507QA06	J	VTR P.W.B. Unit (H420X)	—
	DUNTK2507QA04	J	VTR P.W.B. Unit (H4200S)	—
	DUNTK2507QA07	J	VTR P.W.B. Unit (H90E)	—
34	LHLDZ1270TAZZ	J	Lens Holder	AG
a	XiPSF20P04000	J	Screw	AA
b	LX-HZ0018TAFF	J	Screw	AA
c	LX-BZ0185TAFF	J	Screw	AB
d	LX-BZ0186TAFF	J	Screw	AB
e	XiPSD20P03000	J	Screw	AA
f	LX-BZ0175TAFF	J	Screw	AA
g	LX-BZ0176TAFN	J	Screw	AA
h	LX-BZ0183TAFD	J	Screw	AC
i	LX-HZ3025CEFF	J	Screw	AA
j	XBPSD26P12JS0	J	Screw	AA
k	LX-BZ0187TAFF	J	Screw	AC
l	LX-UZ0015TAFD	J	Screw	AA
n	XRESJ15-04000	J	E-Ring	AA

LENS UNIT PARTS LIST

★MARK: SPARE PARTS DELIVERY SECTION

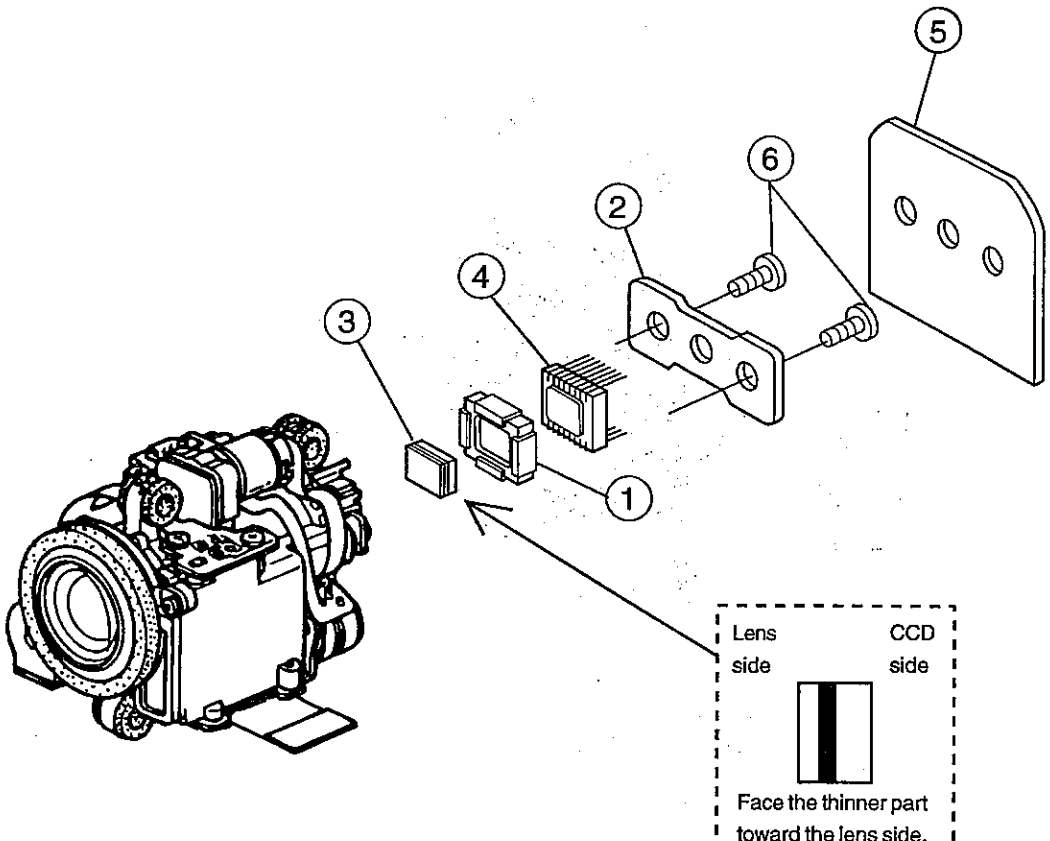
Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
	CLNSA0121TA01	J	Lens Unit	BT	4	99JDF170351FB	J	Phillips Screw	AB
1	99JBCA109A016	J	Anti-Vibration Rubber	AD	A-5	99JBCA111A011	J	Z Motor Ass'y	AW
A-3	99JBCA111A012	J	F Motor Ass'y	AY	6	99JBCA109A012	J	Front Group Frame Rubber	AD



CAMERA UNIT PARTS LIST

★MARK: SPARE PARTS DELIVERY SECTION

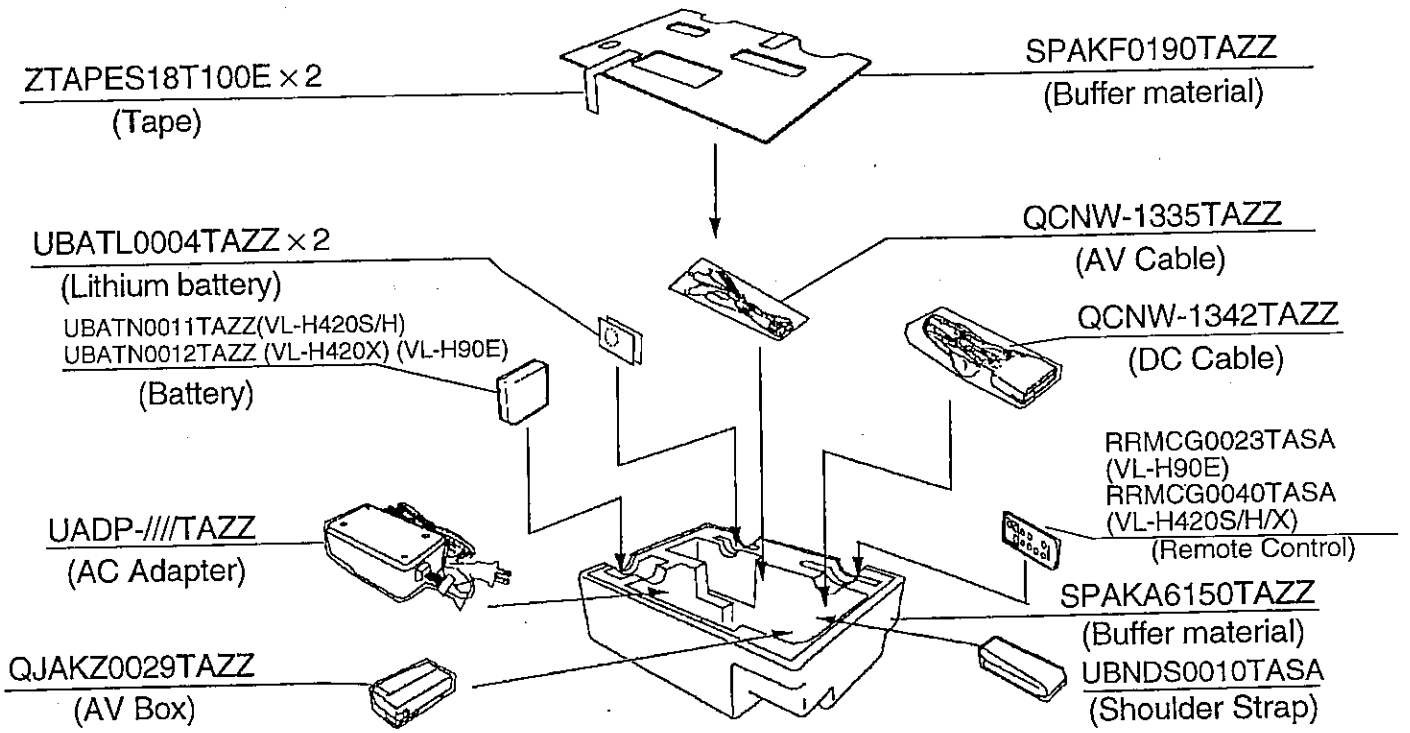
Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
1	PCOVM8016TA00	J	Dustproof Rubber	AC	4	VHiLZ2463A5-1	J	CCD Senser	BQ
2	LANGK0314TAFW	J	CCD Retaining Plate	AC	5	RCCD-0004TAN0	J	CCD PWB Unit	AS
3	PFiLW0062TAZZ	J	Crystal Filter	AU	6	LX-HZ0013TAFF	J	Screw (1.7 x 6)	AA



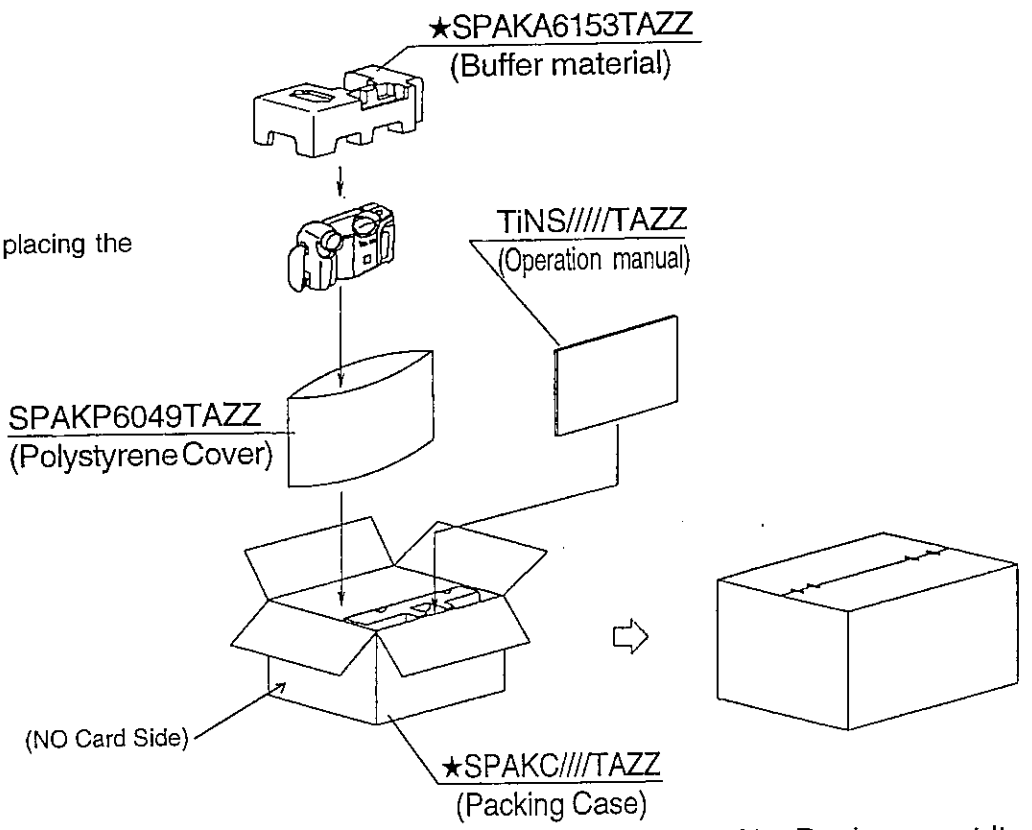
11. PACKING OF THE SET

• Accesory Part code List by Models.

Model	AC adapter	Operation manual	Packing case
VL-H420S	UADP-0206TAZZ	TiNSL0044TAZZ	SPAKC6484TAZZ
VL-H420H	UADP-0207TAZZ	TiNSE0154TAZZ	SPAKC6485TAZZ
VL-H420X	UADP-0208TAZZ	TiNSE0197TAZZ	SPAKC6486TAZZ
VL-H4200S	UADP-0206TAZZ	TiNSL0045TAZZ	SPAKC6488TAZZ
VL-H90E	UADP-0209TAZZ	TiNSZ1425TAZZ	SPAKC6487TAZZ



Co-pack the accessory kit, placing the AC adapter below.



★Not Replacement Item

12. AC ADAPTER

UADP-0206TAZZ(VL-H420S, H4200S)
UADP-0207TAZZ(VL-H420H)
UADP-0208TAZZ(VL-H420X)
UNIT No. UADP-0209TAZZ(VL-H90E)

Features

- Compact and light-weight design for easier portability.
- Automatic voltage change AC 110V to AC 240V allows the adapter usage even in your trips abroad.
- Charging function with battery pack.
- Rapid charging function to enable the charging in a shorter period of time.

Specifications

Power Requirement :	AC110-240V, 50/60Hz
DC Output :	DC4.5V
Power Consumption :	27.0W
Dimension (approx.) :	$2^{31}/_{32}$" (W) X 2" (H) X 5 $^{5}/_{16}$" (D)
	[75mm(W) X 50.5mm (H) X 135mm (D)]
Weight (approx.) :	360g (Hong Kong model : 425g)

*Specifications are subject to change without notice.

12-1. OPERATION MANUAL

12-1-1. Outline

This adapter is designed as the power supply for camcoder as well as the quick charger of the battery used in it.
As shown in Fig. 12-1-1 block diagram, the adapter consists of the separately excited switching regulator which employs control IC, and a multi-functional circuit on the secondary side.
The primary control circuitry and the secondary multi-functional circuitry, composed mainly of the components mounted on the surface, are housed in the small, portable case. They are applicable for a variety of operational conditions of the user.
The multi-input type adapter of 100 V to 240 V 50/60 Hz is employed to satisfy the conditions for various input voltages in order to allow the adapter to be worldwide carried around and used.
The basic operation is controlled by two sections. In the power switching section, constant-voltage and constant-current controls are performed by comparing with the reference voltage at the secondary side. The battery charging section, on the other hand, is provided with timers, various detection circuits and sequence controller. As an AC adapter, the adapter feeds the constant-voltage DC power through the special 3-pin DC jack, and as a battery charger, the adapter starts the rapid charging operation when the exclusive battery is place din position with the DC plug unconnected.

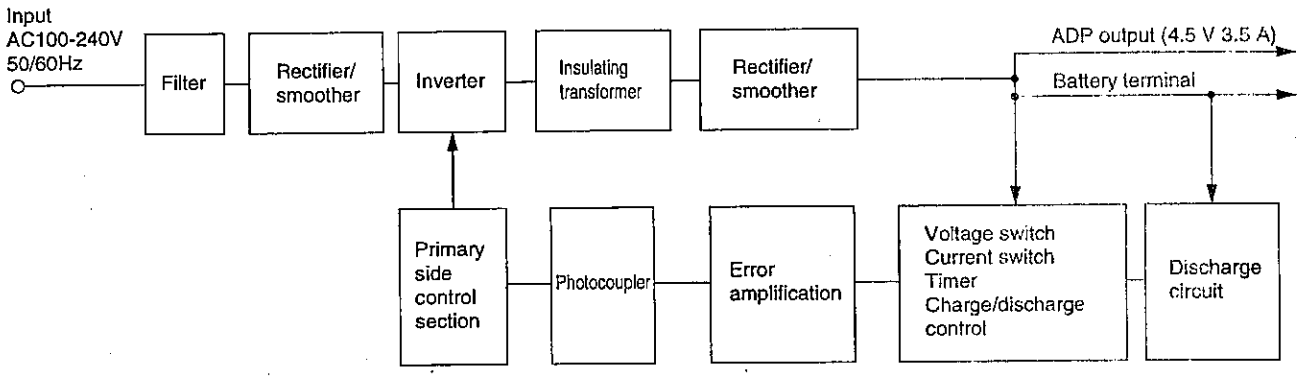


Fig. 12-1-1 Block diagram (Camcorder adapter)

12-1-2. Operation

1.Adapter mode

When the DC plug is attached to the adapter, the constant DC voltage (4.5 V, 3.5 A) can be continuously obtained via the DC jack to operate the camcorder.
The power consumption can be kept constant over the entire control input rage, regardless of input fluctuation.
The output is so available up to 1.3 or more times of the rated current as to resist the starting current, rush current and other transient current which flow in the main body of camcorder.
Also, the adapter output overcurrent protector with fold back current, which controls the power when the short circuit from the outside occurs, is used to prevent the adapter from being destroyed or broken down. It also prevents the temperature inside the adapter from rising too excessively.

2.Ni-Cd charge mode

This adapter, when Ni-Cd battery is attached, can be used as a quick charger. This charging operation is divided into the operating modes of three stages. The adapter goes through these modes sequentially.
The first stage is called initial charging. A constant current of 1.5 A is charged in the range which is limited by the voltage of 5.7 V and the timer of 5 minutes.
The voltage is thus limited in order to protect the battery against overvoltage, and overcharge which would otherwise occur in the fully charged state.
The time limit serves to prevent the charging error which would occur on the dead battery due to the initial voltage drop.
The second stage is a quick charging mode. Like in the initial charging, a rapid charge of 1.5 A is made in the range which is limited by the voltage of 5.7 V, and the timer of 180 minutes which are different from those of the initial charging.
Toward the end of this mode, a battery voltage drop (-ΔV phenomenon) is detected to tell the end of the quick charging, to stop the charging and to go to the next stage. At this charging current of 1.5 A, the 1500 mAh battery, and the 2600 mAh nickel-hydrogen later mentioned are fully charged for about 60 minutes and about 140 minutes, respectively. The timer is set at 180 minutes to avoid an danger of overcharge which is possible due to -ΔV detection error.
Here, the -ΔV detection level is 40 to 80 mV.
In the third stage called auxiliary charging, the fully charged state is kept even after the quick charging is completed.
The auxiliary charging is generally set at 1/30 to 1/40C depending on the characteristics of a battery. This adapter adopts a charging system which is controlled by the operation output controlled at the constant voltage and the fixed resistance.
These charging states are shown by the characteristics in Fig. 12-1-2.

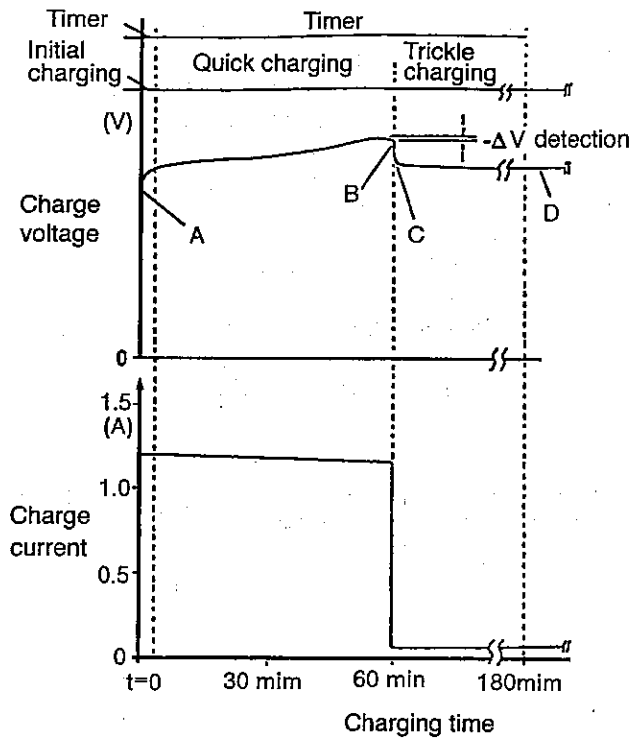


Fig. 12-1-2 Charging characteristics of Ni-Cd 1500 mAh battery

3.Refresh mode

In order to prevent the charging efficiency from dropping due to the memory effect, this adapter has a function to execute the aforementioned charging operation after the provided battery is forcedly discharged to the full extent by operating the user's switch.
This mode is commonly specified for the Ni-Cd battery and the nickel hydrogen battery mentioned later.
Push the refresh switch with the battery in place, and a discharge current of 0.3 to 0.4 A will flow out and the power will be consumed by the resistor inside the adapter.
To minimize its degrading, the battery is discharged down to 3.0 V or so, not further down. Then the battery goes into the charging mode.

4.Nickel hydrogen battery charging mode

When the nickel hydrogen battery is attached to the adapter which is not attached with the DC plug, it will be detected that the T terminal is present, and the quick charge operation of nickel hydrogen will be started.
The charging operation of the nickel hydrogen battery is divided into the operating modes of five stages. The adapter goes through these modes sequentially.
When the nickel hydrogen battery is attached, the precharge will be operated at first.
In this mode, it is charged at a constant current of about 0.5 A, and it will shift into the next mode in 2 minutes.
Since this period is provided to activate the battery, the

end of charging is not detected. It functions the overvoltage detection, abnormal-temperature detection and other battery-protective operations alone.

The next operation is the initial charging operation like the Ni-Cd battery.
Differing from the Ni-Cd battery, the limit voltage of the overvoltage detection is 5.1 V and the function to detect an abnormal temperature is added.

The 3rd stage of the quick charging mode is equivalent to the quick charging of the Ni-Cd battery.
The function to detect the phenomenon in this mode and the mode shift by detection are as follows:

I) -ΔV detection
If -ΔV (22 to 62 mV) is detected, it will shift into the trickle charge mode.

II) Overvoltage detection
If the battery voltage exceeds 5.1 V, it will be judged as abnormal, and it will shift into the trickle charge mode.

III) ΔT detection
If the gradient of the temperature rise of the charging battery exceeds 1°C/min., it will be judged as the end of charging, and it will shift into the auxiliary charging mode.

IV) Abnormal-temperature detection
If the battery reaches a temperature of 60°C to 65°C during charge, the charging operation will stop to protect the battery and it will shift into the auxiliary charging mode.

V) Timer operation
When 180 minutes have passed since start of quick charging, it will shift into the auxiliary charging mode.

In the auxiliary charging mode which it will shift into due to ΔT detection and timer activation of quick charging, it will be charged at a constant current of about 0.5 A like the preparatory charging mode.
At this time, the mode is shifted by each detection function of -ΔV, overvoltage and abnormal temperature in the same manner as the quick charging. But it will be shifted into the auxiliary charging mode by the integrated timer when one hour has elapsed since the auxiliary charging was started.

Like the Ni-Cd battery, the auxiliary charging current is flowed by the constant voltage and fixed resistor in the auxiliary charging mode of the fifth stage.

12-1-3. Circuits

The circuits used for the adapter are explained according to the circuit diagram in Fig. 12-1-3.

1. Input section
The input section consists of noise filter and rectification smoothing circuit of condenser input. The noise filter, which consists of L1, C1, C26 and C34, reduces the common mode noise.
R50 is a resistance for discharging electricity retained at input AC plug when the power is turned off.
The amount of rush current caused when the power is turned on is greatly limited by R2, DCR of L1 and the operating resistance of D1.

2. Switching section
In the switching circuit, DC voltage rectified by C2 is processed by driving the transistor Q1 like the switch corresponding to the signals sent from the control section on the primary side.
Together with the transformer T1, it makes up a high-frequency inverter.
C33 is a capacitor which absorbs the surge voltage generated during switching.

3. Primary side control section
This section drives the switching section by converting the pulse duration of the signal received from the secondary side control circuit through the photocoupler.
The control IC (IC4) is used to drive Q1 (Mos FET). This IC, operating as an overvoltage protector, contains a circuit which stops oscillating when it detects the overvoltage at D8.

4. Output circuit section
The secondary side output, which can be controlled by a popular on-off system, reduces output ripples and common mode noise through the choking coils of L2 and L4.
Q2 is a transistor which is turned on through Q3 by output of the pin 6 of IC3 during quick/preparatory/auxiliary charging.
D11 is used to prevent a discharging trouble from being applied to the control circuit section when the input is turned off with the battery attached.

5. Battery detection circuit
When the battery is installed, SW2 is turned on by the switch knob.
If DC plug is not attached to CN2 at this time, the GND level will be input to the pin 10 of IC by the transistor Q7 in order to detect the installation of the battery.

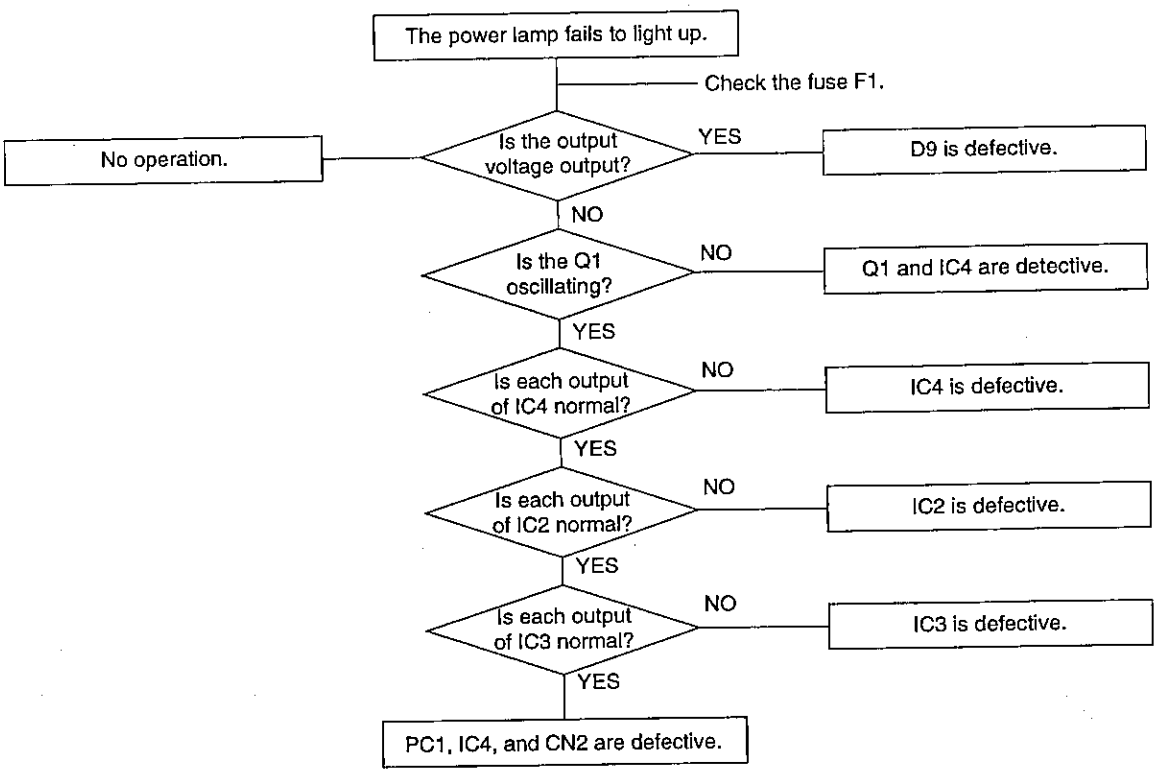
6. Secondary side control circuit
The secondary control section functions to control the switching section by amplifying the errors of the detected output voltage and current and conducting the detected signals to the primary side control circuit through the photocoupler.
The constant voltage is preset and detected with IC2-II, whereas the adapter (4.5 V)/charge (6.5 V) mode is selected by switching the voltage of the pin 5 of IC3 to charge the reference voltage.
The constant current and over-current protector are preset and detected with IC2-I, while 1.5 A/0.5 A constant current is selected by output of the pin 7 of IC3.
The overcurrent protection in the adapter mode is performed by the primary control circuitry.
IC1 gives the drive power for IC3 and has a constant-voltage power supply function to give a reference voltage for IC2 as well as a resetting function to prevent malfunction of IC3.
The constant-voltage output of IC1 is used as the reference voltage during error amplification of the output voltage and circuit.

7. Display
Only D16 (red LED) lights up in the adapter mode.
In the charge mode, D17 (orange LED) lights up together with D16 during quick charging. When quick charging is completed (in the trickle mode), only D17 goes out.
In the refresh mode, D16 stays lit with D17 flashing. The instant the discharging has been completed, the quick charging starts and D17 stops flashing to stay lit.
D17 is controlled to be lit and unlit by the pin 4 of IC3.

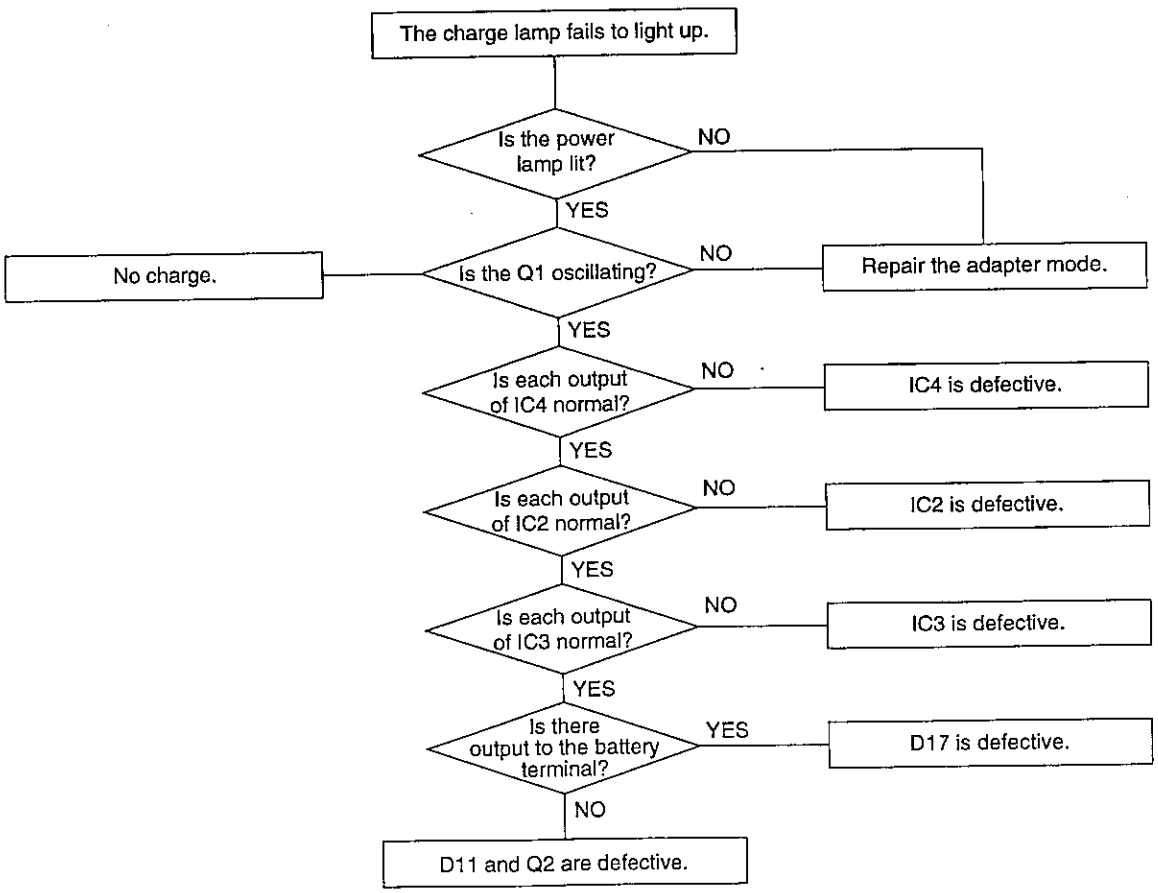
8. Discharge circuit
The discharging function in the refresh mode consists of the discharging resistors R44, R46 and R47 and the discharge-circuit switch Q4.
The discharge current value is determined by the battery voltage and the resistance of the discharging resistor, and the constant current is not controlled.
The voltage to stop discharging is judged at the pin 22 of IC3 by converting the voltage of the discharging battery with R38 and R41.

9. Ground resistance
The discharging resistors (ground resistors) R1 and R52 provided between the primary side and secondary side consist of the parts rated at 1/2 W.

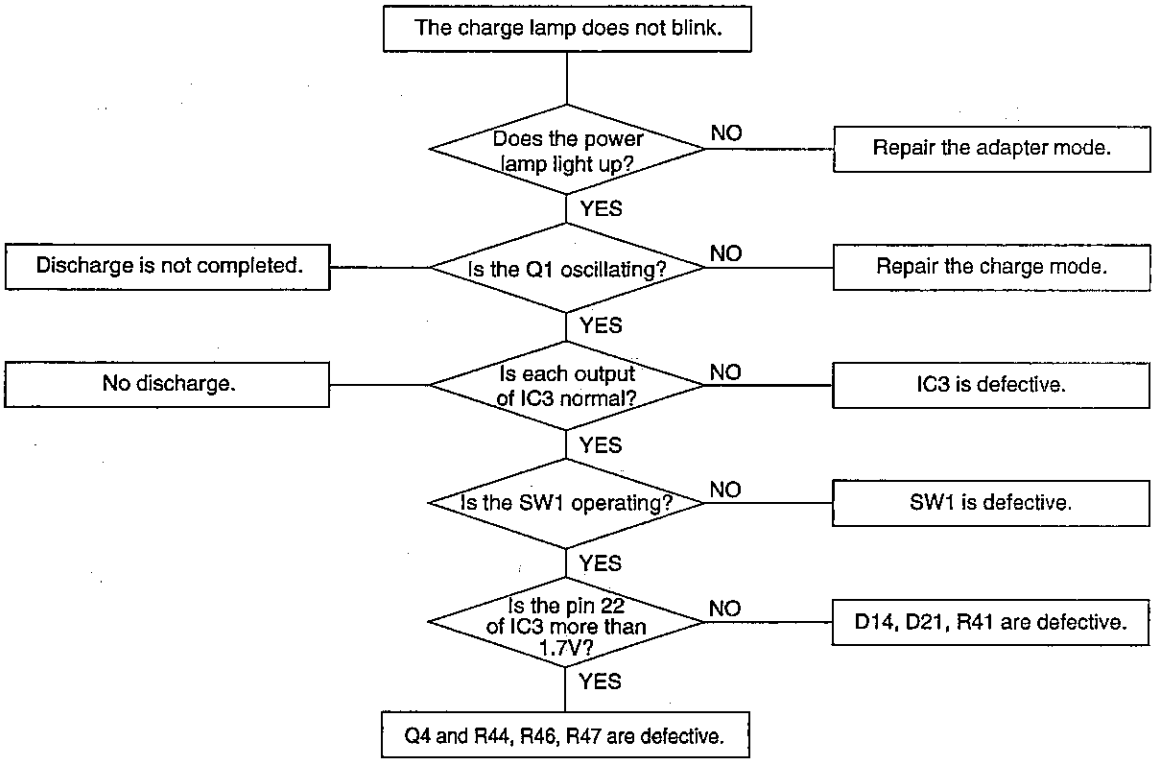
Adapter Mode



Charging Mode

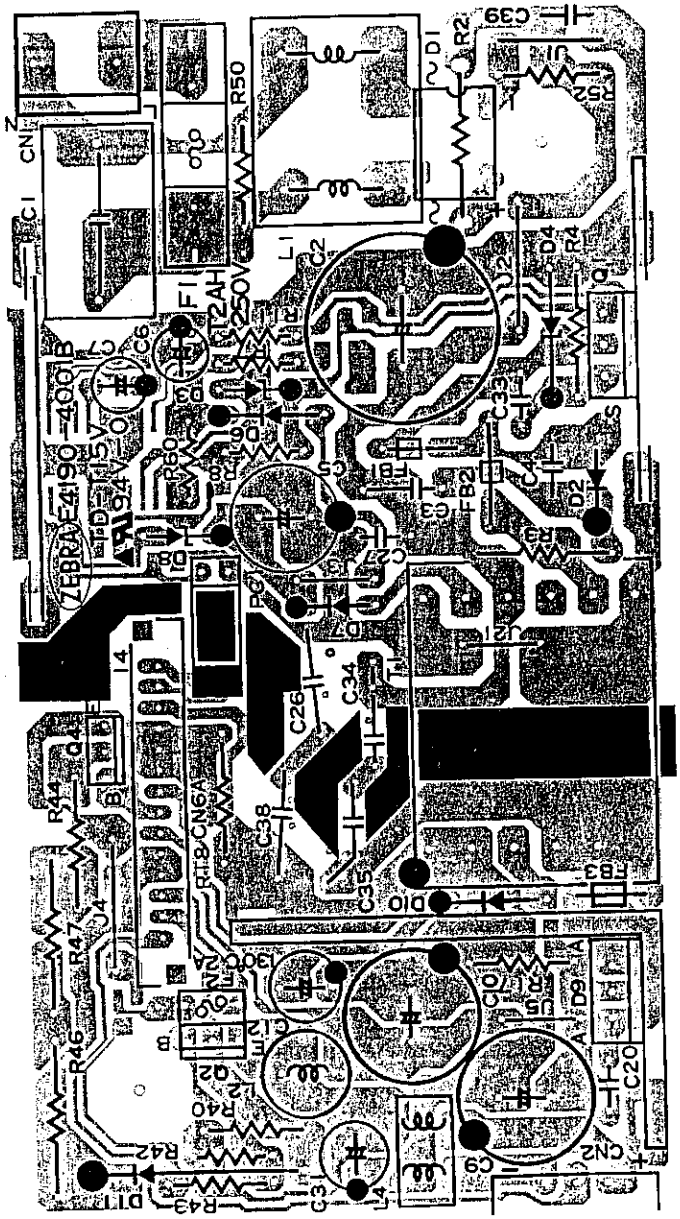


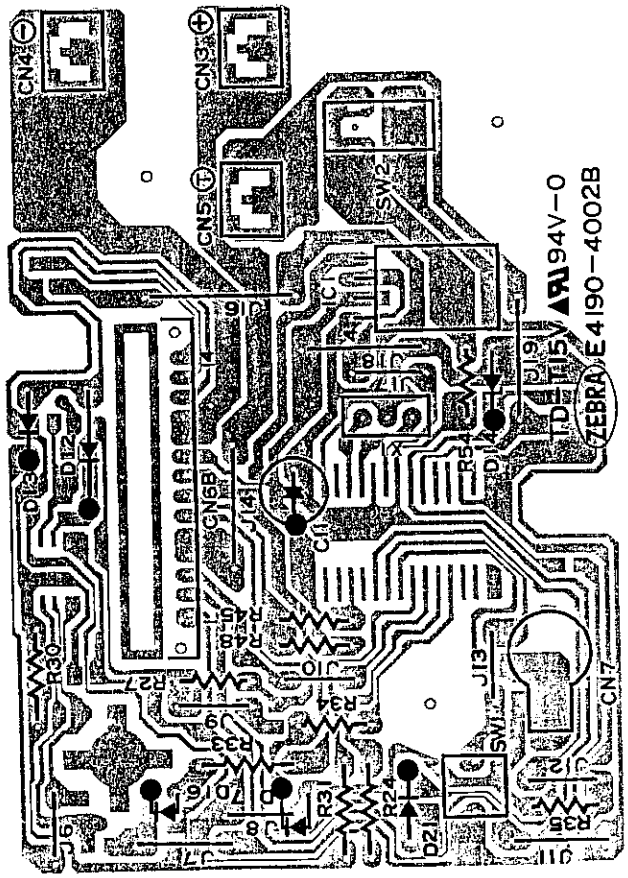
Refresh Mode

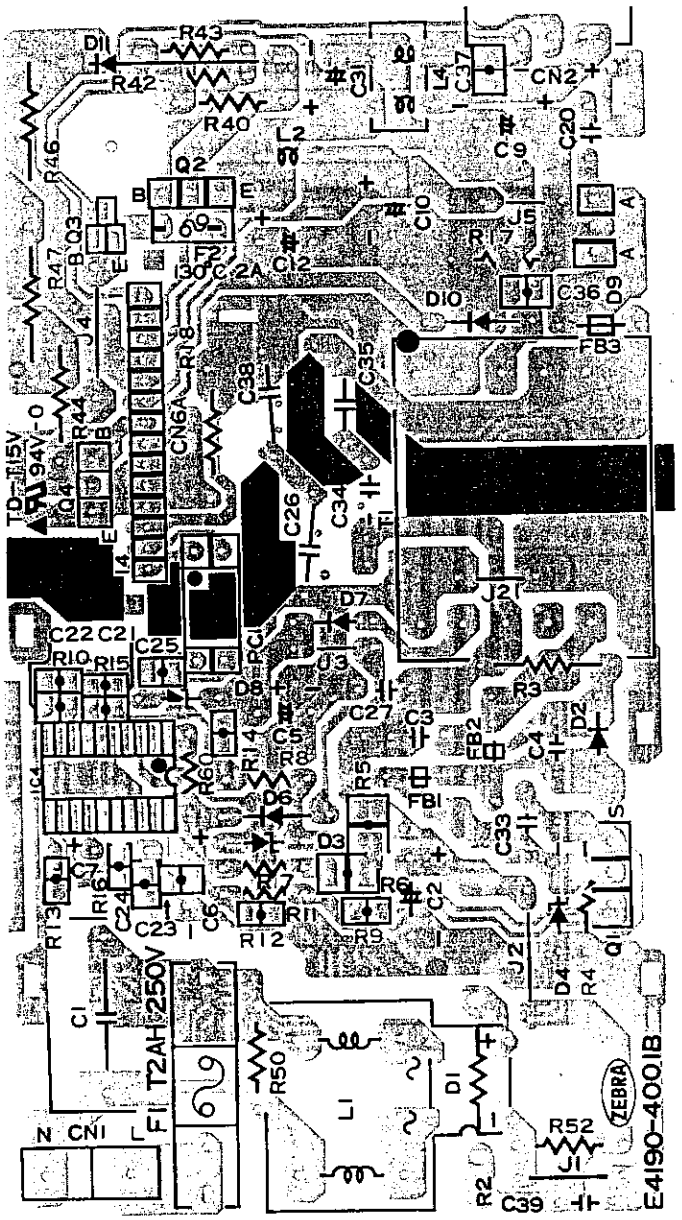


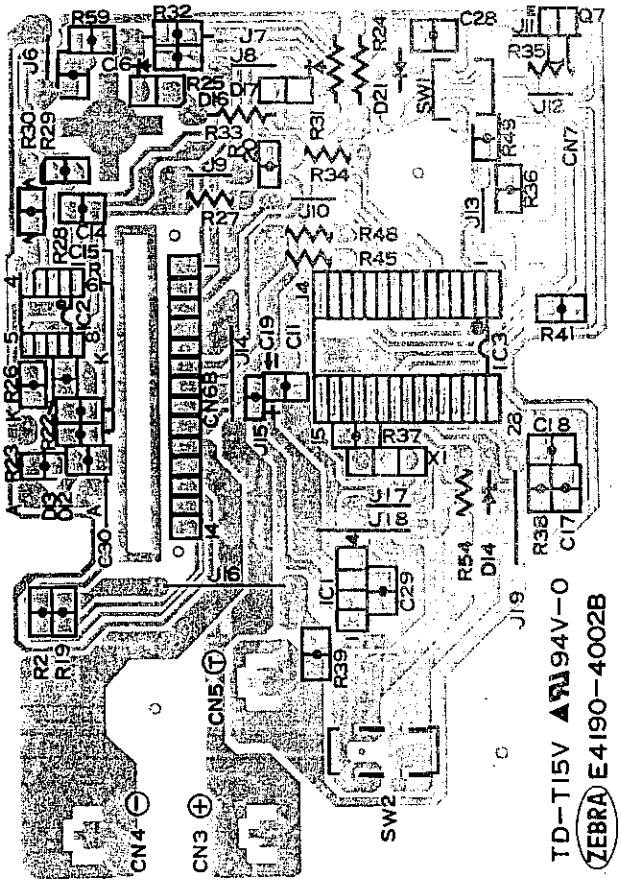
12-2. AC ADAPTER P.W.B.

- UADP-0206TAZZ
- UADP-0207TAZZ

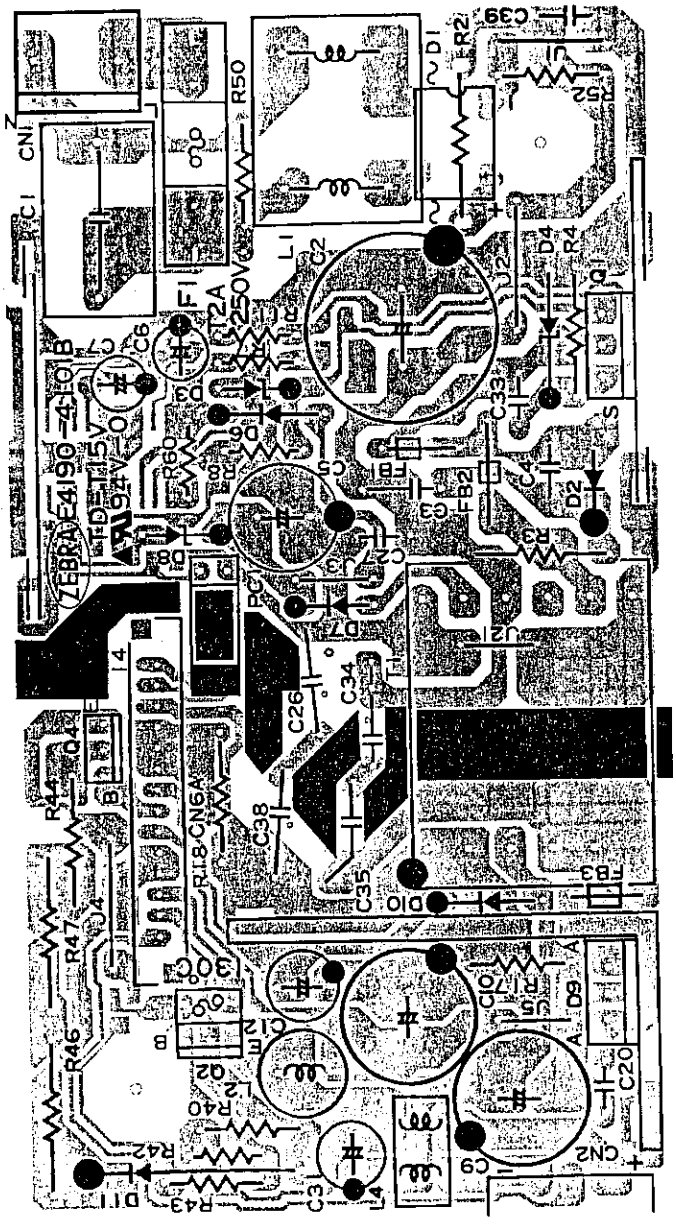


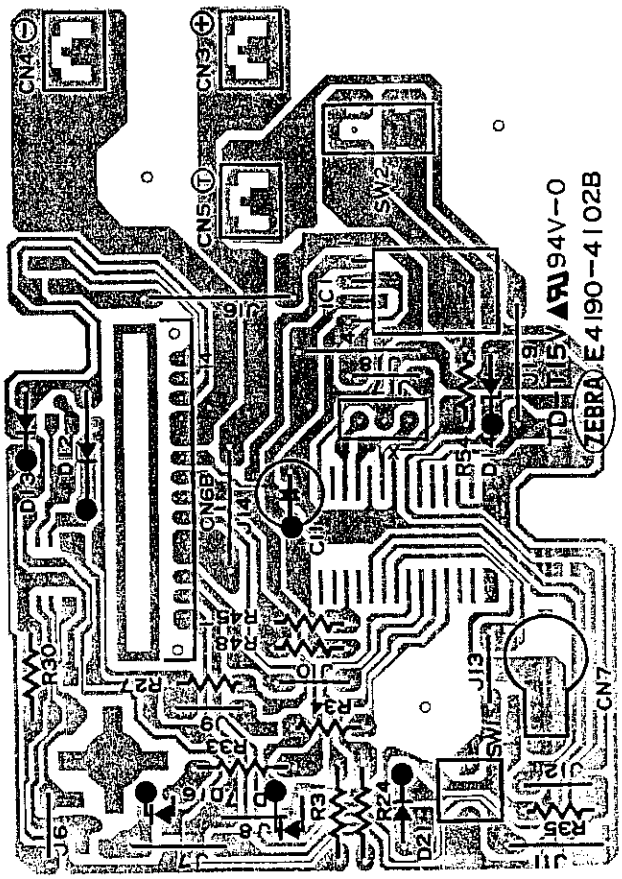


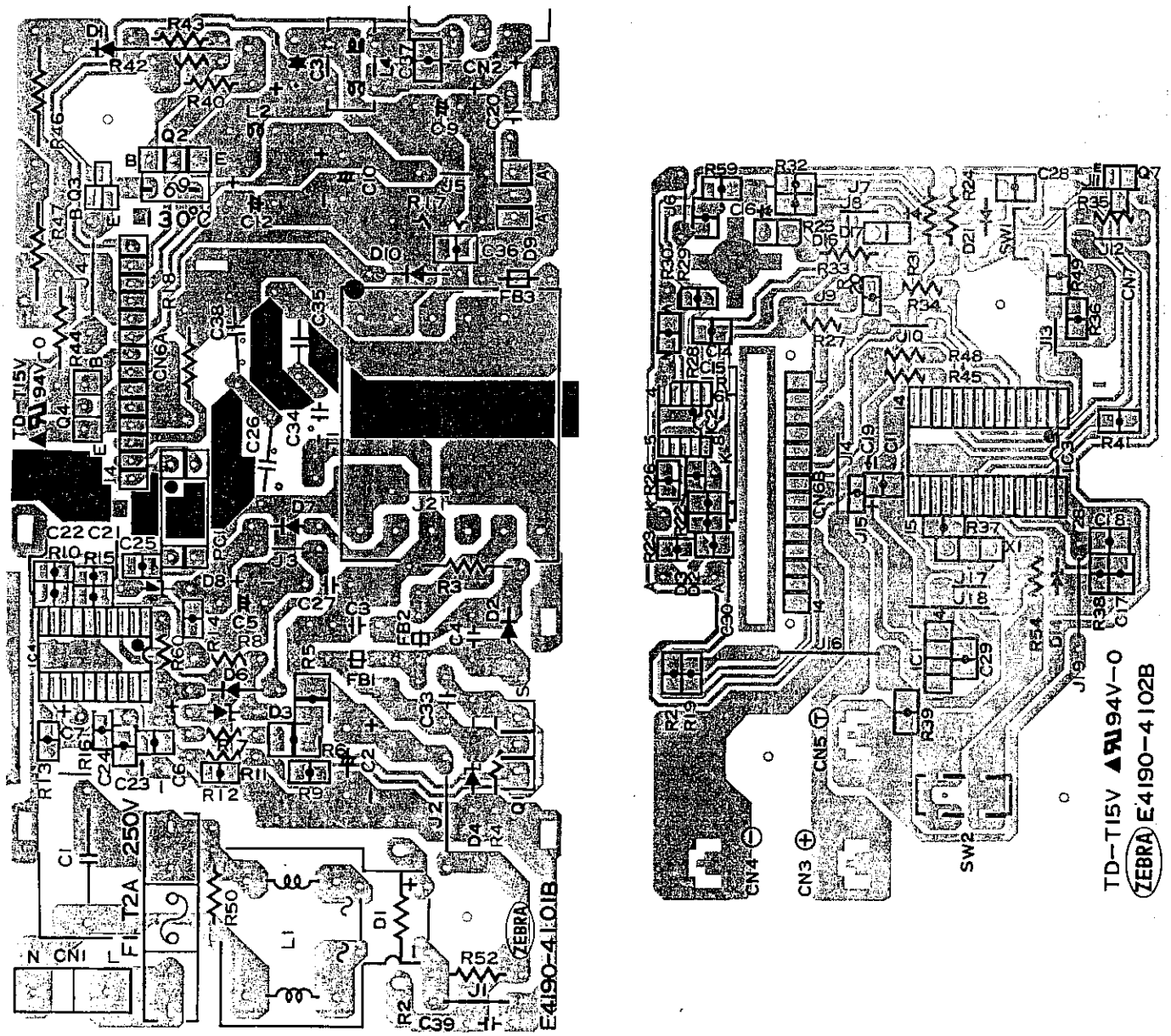

E4190-4001B
ZEBRA
T2AH 250V
F1
CN1
N
L1
R50
R52
C39
D1
D2
D3
D4
D6
D7
D8
D9
D10
D11
Q2
Q3
Q4
C1
C2
C3
C4
C5
C6
C7
C9
C10
C12
C20
C22
C23
C24
C25
C26
C27
C33
C34
C35
C36
C37
C38
R40
R42
R43
R44
R46
R47
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
FB1
FB2
FB3
L2
J2
CN2
CN6A
IC4
TD-T15V 94V-0


TD-T15V 94V-0
ZEBRA E4190-4002B
CN3
CN4
CN5
CN6B
SW1
SW2
IC1
IC2
IC3
R2
R19
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R41
R45
R48
R49
R54
R59
C6
C11
C15
C17
C18
C19
C28
C29
C30
D14
D16
D17
D21
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J15
J16
J17
J18
J19
Q7

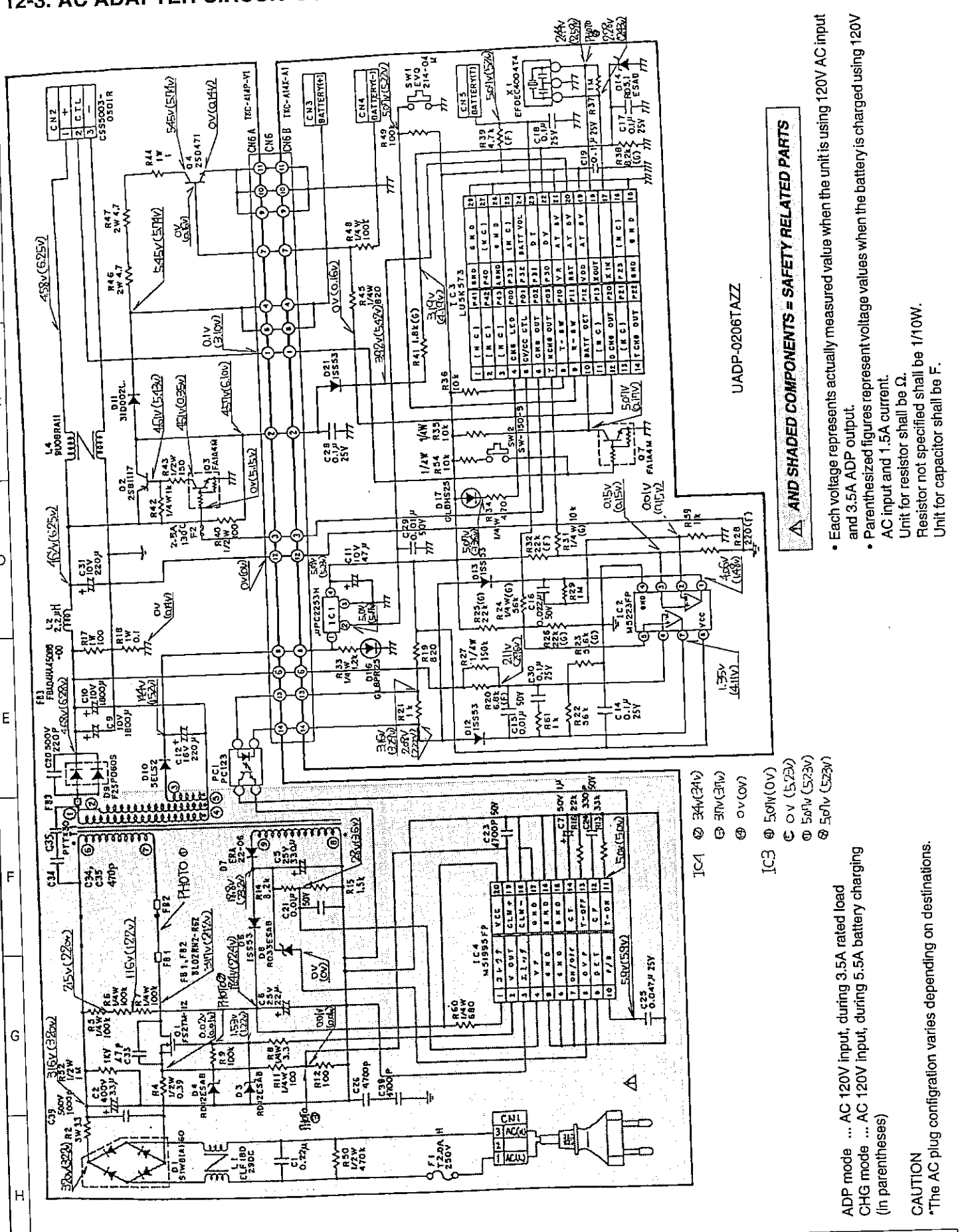
- UADP-0208TAZZ
- UADP-0209TAZZ

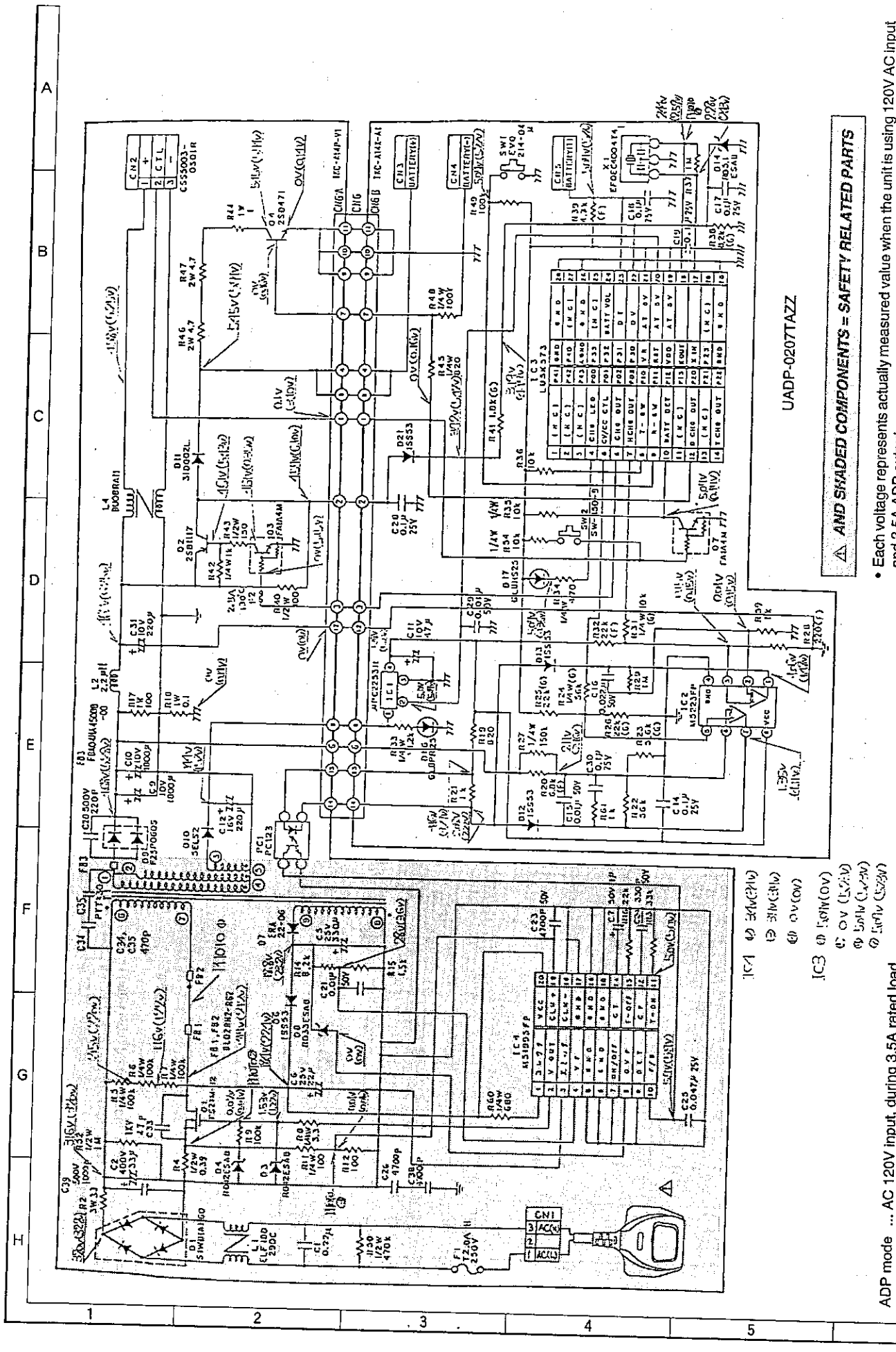


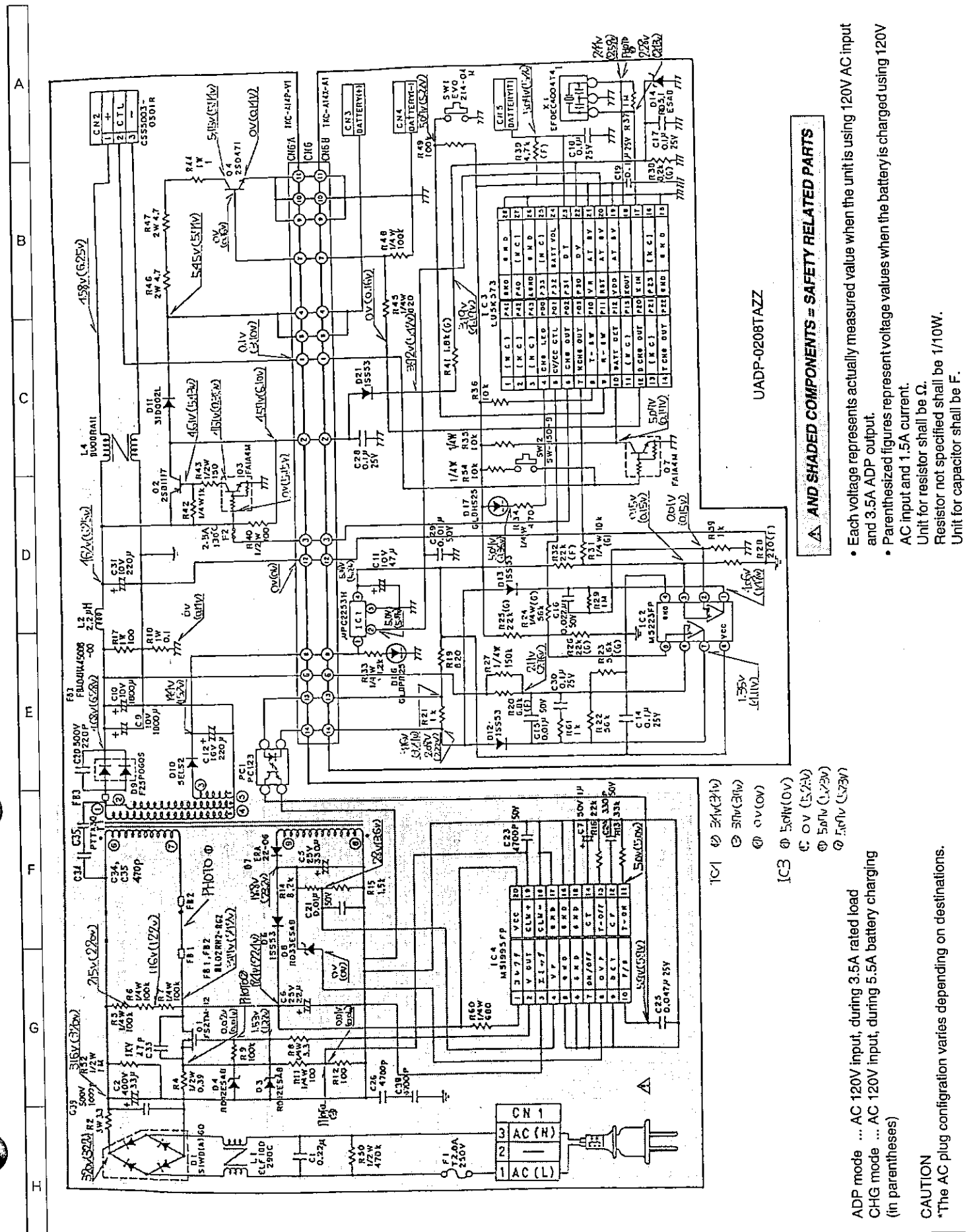


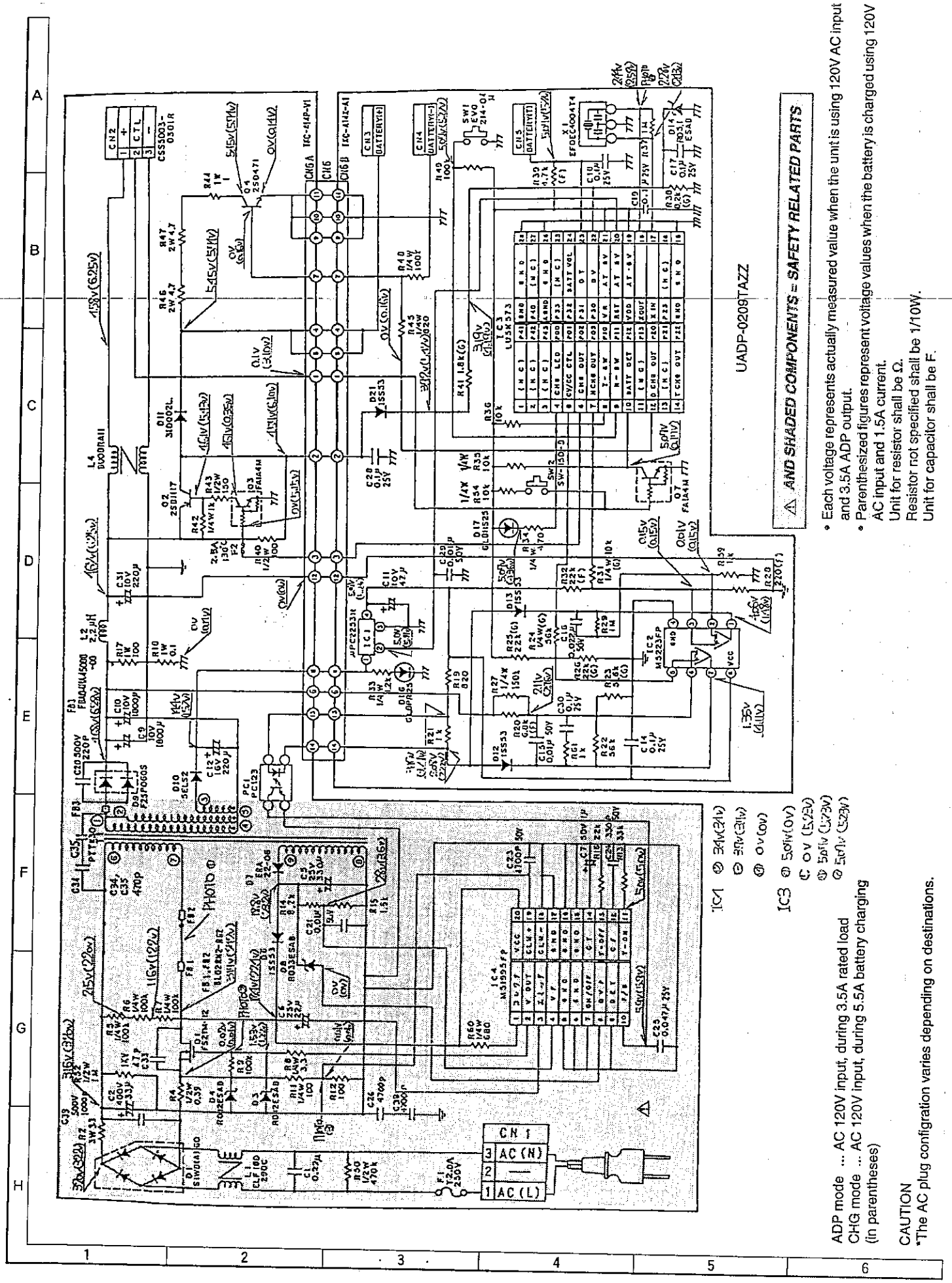

TD-T15V 94V-0
E4190-4102B
ZEBRA
CN1
CN2
CN3
CN4
CN5
CN6
CN7
SW1
SW2
L1
L2
C1
250V
T2A
R50
R52
C39
R43
R42
R40
R46
R47
R44
R41
C12
C36
C35
C38
C34
C26
C22
C21
C25
C27
C3
C5
C8
C4
C24
C23
C6
C7
R10
R15
R60
R14
R8
R5
R6
R11
R12
R9
R13
R16
R3
FB1
FB2
FB3
D1
D2
D3
D4
D6
D7
D8
D10
Q1
Q2
Q3
R59
R32
R24
R35
R33
R34
R31
R27
R48
R45
R49
R36
R37
R38
R54
R39
R4
C28
C29
C30
C31
C32
C33
C9
C10
C11
C13
C14
C15
C16
C17
C18
C19
C20
D5
D9
D11
D12
D13
D14
D21
J1
J2
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
J18
J19
R2
R19
R22
R23
R25
R26
R28
R29
R30

12-3. AC ADAPTER CIRCUIT SCHEMATIC DIAGRAM

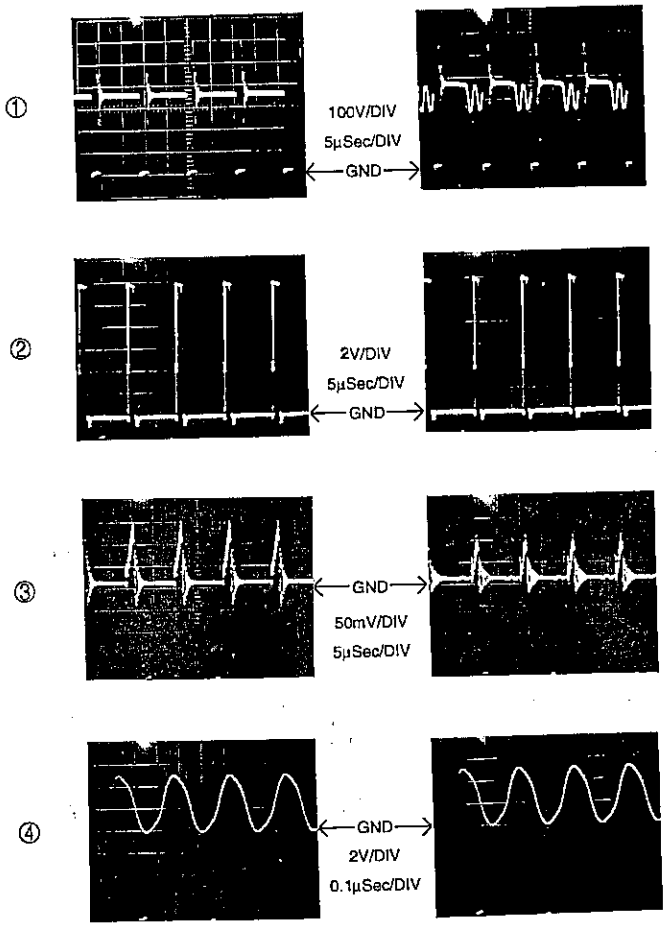

UADP-0206TAZZ
⚠ AND SHADED COMPONENTS = SAFETY RELATED PARTS
• Each voltage represents actually measured value when the unit is using 120V AC input and 3.5A ADP output.
• Parenthesized figures represent voltage values when the battery is charged using 120V AC input and 1.5A current.
Unit for resistor shall be Ω.
Resistor not specified shall be 1/10W.
Unit for capacitor shall be F.
ADP mode ... AC 120V input, during 3.5A rated load
CHG mode ... AC 120V input, during 5.5A battery charging
(In parentheses)
CAUTION
*The AC plug configration varies depending on destinations.


UADP-0207TAZZ
⚠ AND SHADED COMPONENTS = SAFETY RELATED PARTS
• Each voltage represents actually measured value when the unit is using 120V AC input and 3.5A ADP output.
• Parenthesized figures represent voltage values when the battery is charged using 120V AC input and 1.5A current.
Unit for resistor shall be Ω.
Resistor not specified shall be 1/10W.
Unit for capacitor shall be F.
ADP mode ... AC 120V input, during 3.5A rated load
CHG mode ... AC 120V input, during 5.5A battery charging
(in parentheses)
CAUTION
*The AC plug configration varies depending on destinations.


UADP-0208TAZZ
⚠ AND SHADED COMPONENTS = SAFETY RELATED PARTS
• Each voltage represents actually measured value when the unit is using 120V AC input and 3.5A ADP output.
• Parenthesized figures represent voltage values when the battery is charged using 120V AC input and 1.5A current.
Unit for resistor shall be Ω.
Resistor not specified shall be 1/10W.
Unit for capacitor shall be F.
ADP mode ... AC 120V input, during 3.5A rated load
CHG mode ... AC 120V input, during 5.5A battery charging
(in parentheses)
CAUTION
*The AC plug configration varies depending on destinations.
CN1
3 AC (H)
2 —
1 AC (L)
IC1 ④ 34V(34V) ⑤ 34V(34V) ⑥ 0V(0V)
IC3 ⑧ 5.0V(5.0V) ⑨ 0V(0V) ⑩ 5.0V(5.0V) ⑪ 5.0V(5.0V)


UADP-0209TAZZ
⚠ AND SHADED COMPONENTS = SAFETY RELATED PARTS
• Each voltage represents actually measured value when the unit is using 120V AC input and 3.5A ADP output.
• Parenthesized figures represent voltage values when the battery is charged using 120V AC input and 1.5A current.
Unit for resistor shall be Ω.
Resistor not specified shall be 1/10W.
Unit for capacitor shall be F.
ADP mode ... AC 120V input, during 3.5A rated load
CHG mode ... AC 120V input, during 5.5A battery charging
(in parentheses)
CAUTION
•The AC plug configration varies depending on destinations.
CN1
AC (N)
AC (L)

• ADP mode • CHG mode



REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with " ⚠ " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION
5. PRICE CODE

⚠MARK: SAFETY RELATED PARTS

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code

INTEGRATED CIRCUITS

IC1	95KUCB0118AZ	J	UPC2253H	AH
IC2	95KUCY0011AK	J	M5223FP	AE
IC3	95KUCY0030AK	J	LU5K573	AP
IC4	95KUCY0010AK	J	M51995FP	AP

TRANSISTORS

⚠ Q1	95KUAG0104AZ	J	FS2TM-12	AL
Q2	95KUAB0055AK	J	2SB1117	AF
Q3	95KUAY0002AK	J	FA1A4M	AC
Q4	95KUAD0038KZ	J	2SD471	AD
Q7	95KUAY0002AK	J	FA1A4M	AC

DIODES

D1	95KUBB0148DZ	J	S1WB(A)60	AF
D3	95KUBDAK120C	J	RD12ESAB	AB
D4	95KUBDAK120C	J	RD12ESAB	AB
D6	95KUBA0004KZ	J	1SS53	AB
D7	95KUBC0169CK	J	ERA22-06	AC
D8	95KUBDAK330C	J	RD33ESAB	AC
D9	95KUBB0230AZ	J	F25P06QS	AM
D10	95KUBC0250AK	J	5ELS2	AC
D11	95KUBC0095GC	J	31DQ02L-FC	AF
D12	95KUBA0004KZ	J	1SS53	AB
D13	95KUBA0004KZ	J	1SS53	AB
D14	95KUBDAK5R1B	J	RD5.1ESAB	AB
D16	95KUDC0173AZ	J	GL8PR25	AD
D17	95KUDC0174AZ	J	GL8HS25	AD
D21	95KUBA0004KZ	J	1SS53	AB

Ref. No.	Part No.	★	Description	Code
COILS AND TRANSFORMER				
⚠ T1	95K129065002	J	Transformer	BB
L1	95KUKZ0306ZZ	J	Chock coil	AK
L2	95KUKZ0505ZK	J	Coil	AF
L4	95KUKZ0707ZZ	J	Chock coil	AH
X1	95KUZZ0133ZZ	J	Crystal	AE
CAPACITORS				
C1	95KUGFM224HG	J	0.22µF	AH
C2	95KUGZ0952ZZ	J	33µF, 400V	AK
C5	95KUGAD331RV	J	330µF, 25V	AE
	or			
C5	95KUGAD331HN	J	330µF, 25V	AE
C6	95KUGAD220RV	J	22µF, 25V	AC
	or			
C6	95KUGAD220HN	J	22µF, 25V	AD
C7	95KUGAF010RV	J	1µF, 50V	AC
	or			
C7	95KUGAF010HN	J	1µF, 50V	AB
C9	95KUGAB182NS	J	1800µF, 10V	AF
C10	95KUGAB182NS	J	1800µF, 10V	AF
C11	95KUGAB470KL	J	47µF, 10V	AE
	or			
C11	95KUGAB470KF	J	47µF, 10V	AD
C12	95KUGAC221RV	J	220µF, 15V	AD
	or			
C12	95KUGAC221HN	J	220µF, 15V	AC
C14	95KUGXAED104	J	0.1µF	AB
C15	95KUGXAEF103	J	0.01µF	AB
C16	95KUGXAEF223	J	0.022µF	AB
C17	95KUGXAED104	J	0.1µF	AB
C18	95KUGXAED104	J	0.1µF	AB
C19	95KUGXAED104	J	0.1µF	AB
C20	95KUGCS221AA	J	220pF, 500V	AB
C21	95KUGXAEF103	J	0.01µF	AB
C23	95KUGXAEF472	J	4700µF	AB
C24	95KUGXAEF331	J	330pF	AA
C25	95KUGXAED473	J	0.047µF	AB
C26	95KUGCQ472AB	J		AD
C28	95KUGXAED104	J	0.1µF	AB
C29	95KUGXAEF103	J	0.01µF	AB
C30	95KUGXAED104	J	0.1µF	AB
C31	95KUGAB221RV	J	220µF, 10V	AB
	or			
C31	95KUGAB221HN	J	220µF, 10V	AC
C33	95KUGZ0779ZZ	J	47p	AC
	or			
C33	95KUGCU470BG	J	47p	AB
C34	95KUGCZ471BV	J	470pF	AD
C35	95KUGCZ471BV	J	470pF	AD
C38	95KUGCQ472AB	J	4700pF	AD
C39	95KUGCS102AA	J	1000pF, 500V	AB

Ref. No.	Part No.	★	Description	Code
RESISTORS				
⚠ R2	95KUEFF3R3BM	J	3.3, 3W	AE
⚠ R4	95KUEFCR39AU	J	0.39	AC
R5	95KUEXDAK104	J	100K, 1/4W	AB
	or			
R5	95KUEXJAB104	J	100K, 1/4W	AB
R6	95KUEXDAK104	J	100K, 1/4W	AB
	or			
R6	95KUEXJAB104	J	100K, 1/4W	AB
R7	95KUEEB104BR	J	100K, 1/4W	AB
	or			
R7	95KUEEB104BE	J	100K, 1/4W	AA
R8	95KUEEB3R3BR	J	3.3, 1/4W	AB
	or			
R8	95KUEEB3R3BE	J	3.3, 1/4W	AB
R9	95KUEXCAS104	J	100K	AB
	or			
R9	95KUEXCAC104	J	100K	AA
	or			
R9	95KUEXCAA104	J	100K	AA
R11	95KUEEB101BR	J	100, 1/4W	AB
	or			
R11	95KUEEB101BE	J	100, 1/4W	AA
R12	95KUEXCAS101	J	100	AB
	or			
R12	95KUEXCAC101	J	100	AA
	or			
R12	95KUEXCAA101	J	100	AA
R13	95KUEXCAS333	J	33K	AB
	or			
R13	95KUEXCAC333	J	33K	AA
	or			
R13	95KUEXCAA333	J	33K	AA
R14	95KUEXCAS822	J	8.2K	AB
	or			
R14	95KUEXCAC822	J	8.2K	AA
	or			
R14	95KUEXCAA822	J	8.2K	AA
R15	95KUEXCAS152	J	1.5K	BB
	or			
R15	95KUEXCAC152	J	1.5K	AA
	or			
R15	95KUEXCAA152	J	1.5K	AA
R16	95KUEXCAS223	J	22K	AB
	or			
R16	95KUEXCAC223	J	22K	AA
	or			
R16	95KUEXCAA223	J	22K	AA
R17	95KUEFD101CF	J	100, 1/2W	AB
	or			
R17	95KUEFD101BH	J	100, 1/2W	AA
R18	95KUEFD0R1CE	J	0.1, 1W	AB
R19	95KUEXCAS821	J	820	AB
	or			
R19	95KUEXCAC821	J	820	AB

Ref. No.	Part No.	★	Description	Code
	or			
R19	95KUEXCAA821	J	820	AB
R20	95KUEXCAU682	J	6.8K	AB
	or			
R20	95KUEYAB6801	J	6.8K	AB
	or			
R20	95KUEYAA6801	J	6.8K	AB
R21	95KUEXCAS102	J	1K	AB
	or			
R21	95KUEXCAC102	J	1K	AA
	or			
R21	95KUEXCAA102	J	1K	AA
R22	95KUEXCAS563	J	56K	AB
	or			
R22	95KUEXCAC563	J	56K	AA
	or			
R22	95KUEXCAA563	J	56K	AA
R23	95KUEXCAT562	J	5.6K	AB
R24	95KUES5602BR	J	56K, 1/4W	AB
	or			
R24	95KUES5602AE	J	56K, 1/4W	AB
R25	95KUEXCAT223	J	22K	AB
	or			
R25	95KUEYAC2202	J	22K	AB
	or			
R25	95KUEXCAE223	J	22K	AB
R26	95KUEXCAT223	J	22K	AB
	or			
R26	95KUEYAC2202	J	22K	AB
	or			
R26	95KUEXCAE223	J	22K	AB
R27	95KUEEB154BR	J	150K, 1/4W	AB
	or			
R27	95KUEEB154BE	J	150K, 1/4W	AA
R28	95KUEXCAU221	J	220	AB
	or			
R28	95KUEYAB2200	J	220	AB
	or			
R28	95KUEYAA2200	J	220	AB
R29	95KUEXCAS105	J	1M	AB
	or			
R29	95KUEXCAC105	J	1M	AA
	or			
R29	95KUEXCAA105	J	1M	AA
R31	95KUES1002BR	J	10K, 1/4W	AB
	or			
R31	95KUES1002AE	J	10K, 1/4W	AB
R32	95KUEXCAU223	J	22K	AB
	or			
R32	95KUEYAB2202	J	22K	AB
R33	95KUEEB122BR	J	1.2K, 1/4W	AB
	or			
R33	95KUEEB122BE	J	1.2K, 1/4W	AA
R34	95KUEEB471BR	J	470, 1/4W	AB
	or			
R34	95KUEEB471BE	J	470, 1/4W	AA

Ref. No.	Part No.	★	Description	Code
R35	95KUEEB103BR	J	10K, 1/4W	AB
	or			
R35	95KUEEB103BE	J	10K, 1/4W	AA
R36	95KUEXCAS103	J	10K	AB
	or			
R36	95KUEXCAC103	J	10K	AA
	or			
R36	95KUEXCAA103	J	10K	AA
R37	95KUEXCAS105	J	1M	AB
	or			
R37	95KUEXCAC105	J	1M	AA
	or			
R37	95KUEXCAA105	J	1M	AA
R38	95KUEXCAT822	J	8.2K	AB
	or			
R38	95KUEXCAE822	J	8.2K	AB
	or			
R38	95KUEYAC8201	J	8.2K	AB
R39	95KUEXCAU472	J	4.7K	AB
	or			
R39	95KUEYAB4701	J	4.7K	AB
	or			
R39	95KUEYAA4701	J	4.7K	AB
R40	95KUEEC101BK	J	100, 1/2W	AB
	or			
R40	95KUEEC101BE	J	100, 1/2W	AA
R41	95KUEXCAT182	J	1.8K	AB
	or			
R41	95KUEYAC1801	J	1.8K	AB
	or			
R41	95KUEXCAE182	J	1.8K	AB
R42	95KUEEB102BR	J	1K, 1/4W	AB
	or			
R42	95KUEEB102BE	J	1K, 1/4W	AA
R43	95KUEEC151BK	J	150, 1/2W	AB
	or			
R43	95KUEEC151BE	J	150, 1/2W	AB
⚠ R44	95KUEFD1R0CE	J	1, 1W	AC
	or			
R44	95KUEFD1R0BF	J	1, 1W	AC
R45	95KUEEB821BR	J	820, 1/4W	AB
	or			
R45	95KUEEB821BE	J	820, 1/4W	AA
⚠ R46	95KUEFE4R7CW	J	4.7, 2W	AC
	or			
R46	95KUEFE4R7AV	J	4.7, 2W	AD
⚠ R47	95KUEFE4R7CW	J	4.7, 2W	AC
	or			
R47	95KUEFE4R7AV	J	4.7, 2W	AD
R48	95KUEEB104BR	J	100K, 1/4W	AB
	or			
R48	95KUEEB104BE	J	100K, 1/4W	AA
R49	95KUEXCAS104	J	100K	AB
	or			
R49	95KUEXCAC104	J	100K	AA
	or			

Ref. No.	Part No.	★	Description	Code
R49	95KUEXCAA104	J	100K	AA
R50	95KUECC474AB	J	470k, 1/2W	AB
R52	95KUEEC105BK	J	1M, 1/2W	AB
	or			
R52	95KUEEC105BE	J	1M, 1/2W	AA
R54	95KUEEB103BR	J	10K, 1/4W	AB
	or			
R54	95KUEEB103BE	J	10K, 1/4W	AA
R59	95KUEXCAS102	J	1K	AB
	or			
R59	95KUEXCAC102	J	1K	AA
	or			
R59	95KUEXCAA102	J	1K	AA
R60	95KUEEB681BR	J	680, 1/4W	AB
	or			
R60	95KUEEB681BE	J	680, 1/4W	AA
R61	95KUEXCAS102	J	1K	AB
	or			
R61	95KUEXCAC102	J	1K	AA
	or			
R61	95KUEXCAA102	J	1K	AA

MISCELLANEOUS

Ref. No.	Part No.	★	Description	Code
FB1	95KBFZ89322Z	J	Balun	AD
FB2	95KBFZ89322Z	J	Balun	AD
FB3	95KUKZ0334ZZ	J	Balun Inductor	AB
⚠ PC1	95KUDC0163BB	J	Photo Coupler	AH
CN6A	95KPCZ0196ZZ	J	Connector	AG
CN6B	95KPCZ0195ZZ	J	Connector	AG
CN1	95KPKZ0194ZZ	J	Socket	AC
CN2	95KPEZ0088ZZ	J	Socket	AH
CN3	95KFBZ0140ZZ	J	Terminal	AD
CN4	95KFBZ0140ZZ	J	Terminal	AD
CN5	95KFBZ0140ZZ	J	Terminal	AD
CN6	95KLRZ6058ZM	J	Terminal	AC
SW1	95KPFZ0267ZZ	J	Switch	AD
SW2	95KPFZ0271ZZ	J	Switch	AG
⚠ F1★	95KEHS0528ZZ	J	Fuse T2A, 250V (H420S/H, H4200S)	AH

Ref. No.	Part No.	★	Description	Code
⚠ F1★	95KPJCAY2001	J	Fuse T2A, 250V (H420X, H90E)	AD
⚠ ✳	95KEHS0528ZZ	J	AC Cord (H420S, H4200S)	AN
⚠ ✳	95KEHS0631ZZ	J	AC Cord (H420H)	BB
⚠ ✳	95KEHS0664ZZ	J	AC Cord (H420X)	AU
⚠ ✳	95KEHS0531ZZ	J	AC Cord (H90E)	AN

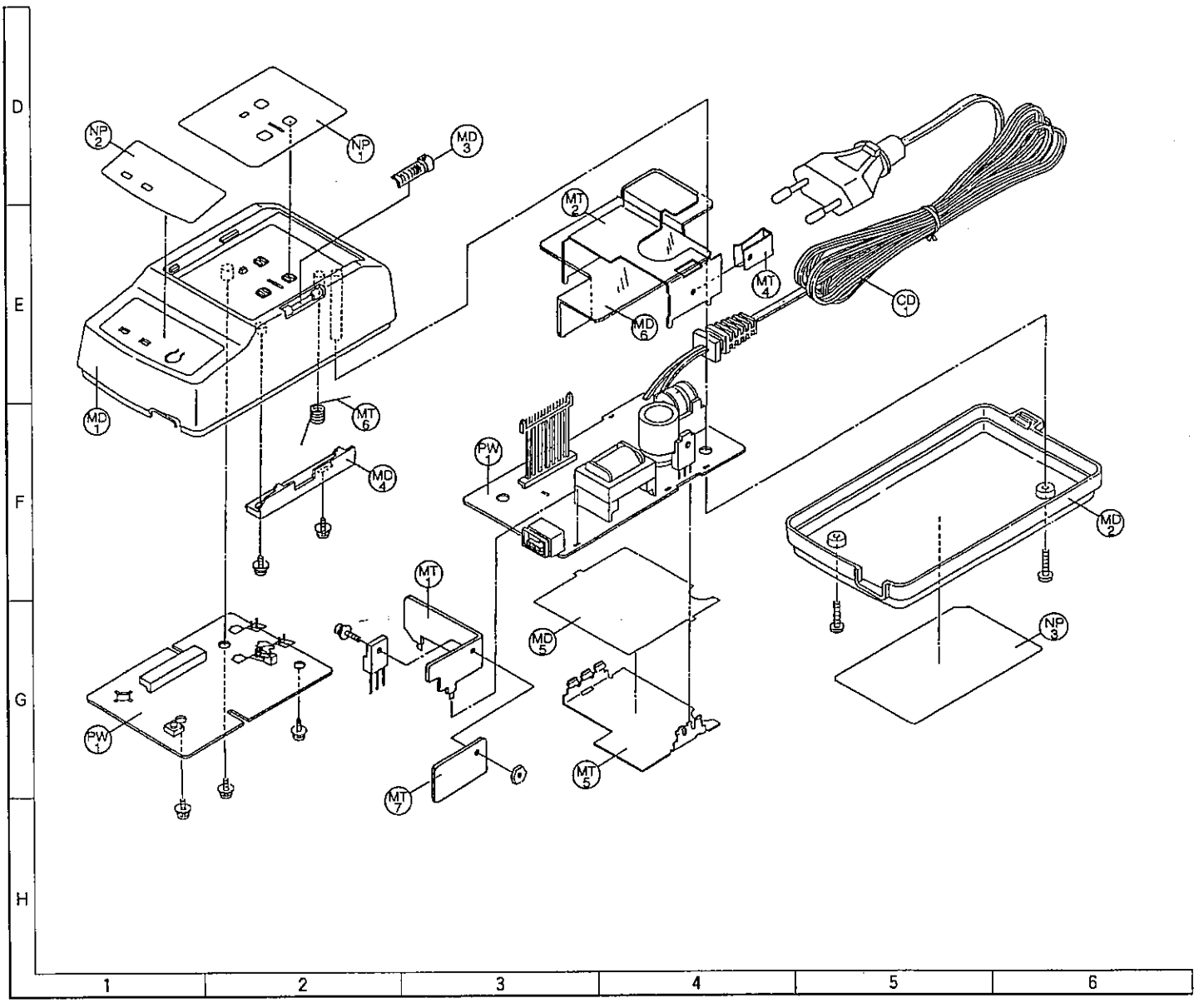
✳ Remark:
When changing main cord the whole cord with connection plug must be changed.
The cable is kept as a apare parts by:

- SWEEDEN
  SHARP ELECTRONICS (SVENSKA) AB
- DENMARK
  RUDOLPH SCHMIDT A/S
- FINLAND
  ASA KULUTUS ELEKTRONIIKA OY
- NORWAY
  TRANSEL A/S

CABINET PARTS

MT1	95KLRZ6091ZR	J	Sink, Heat	AH
MT2	95KLRZ6092ZP	J	Sink, Heat	AG
MT4	95KLRS5015ZZ	J	Supporter	AC
MT5	95KLRZ6114ZZ	J	Shild Cover	AD
MT6	95KLRZ6095ZZ	J	Spring	AC
MT7	95KLRZ6109ZR	J	Sink, Heat	AF
MD1	95KMRZ5412ZZ	J	Cabinet, Upper	AM
MD2	95KMRZ5413ZZ	J	Cabinet, Lower	AL
MD3	95KMRZ5414ZZ	J	Eject knob	AF
MD4	95KMRZ5415ZZ	J	Lock Lever	AH
MD5	95KGZZ5200ZZ	J	Sheet, Insulator	AF
NP1	95KSBB1772ZZ	J	Label	AH
NP2	95KSAB1067ZZ	J	Name Plate	AF
NP3	95KSAB1083ZZ	J	Label (H420S, H4200S)	AH
NP3	95KSAB1084ZZ	J	Label (H420H)	AH
NP3	95KSAB1085ZZ	J	Label (H420X)	AH
NP3	95KSBB1792ZZ	J	Label (H90E)	AL
FH1	95KPZZ0625ZZ	J	Fuse Holder	AB

UADP-0206TAZZ
UADP-0207TAZZ
UADP-0208TAZZ
UADP-0209TAZZ



VL-H420S/H/X
VL-H4200S/H90E

SHARP

T1199-S
Printed in Japan